

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY)
 THE OIL CONSERVATION DIVISION FOR THE)
 PURPOSE OF CONSIDERING:)
)
 APPLICATION OF DEVON ENERGY PRODUCTION) CASE NOS. 13,048
 COMPANY, L.P., FOR COMPULSORY POOLING,)
 LEA COUNTY, NEW MEXICO)
)
 APPLICATION OF EGL RESOURCES, INC.,) and 13,049
 FOR COMPULSORY POOLING, LEA COUNTY,)
 NEW MEXICO)
 _____) (Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID K. BROOKS, JR., Hearing Examiner

April 10th, 2003

Santa Fe, New Mexico

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Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID K. BROOKS, JR., Hearing Examiner, on Thursday, April 10th, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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A P P E A R A N C E S

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By: J. SCOTT HALL

* * *

ALSO PRESENT:

DAVID R. CATANACH
Hearing Examiner
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, NM 87505

* * *

1 WHEREUPON, the following proceedings were had at
2 10:34 a.m.:

3 EXAMINER BROOKS: At this time we will call Case
4 Number 13,048, Application of Devon Energy Production
5 Company, L.P., for compulsory pooling, Lea County, New
6 Mexico.

7 And in association therewith we will call Case
8 Number 13,049, Application of EGL Resources, Inc., for
9 compulsory pooling, Lea County, New Mexico.

10 Call for appearances.

11 MR. KELLAHIN: Examiner Brooks, I'm Tom Kellahin
12 of the Santa Fe law firm of Kellahin and Kellahin. I'm
13 appearing today on behalf of Devon. We are the Applicant
14 in the first case and the opponent in the second case.

15 EXAMINER BROOKS: And do you have witnesses?

16 MR. KELLAHIN: Yes, sir, I have four to be sworn.

17 EXAMINER BROOKS: Other appearances?

18 MR. HALL: Mr. Examiner, Scott Hall, Miller
19 Stratvert, P.A., Santa Fe, appearing on behalf of EGL
20 Resources, Incorporated, and Robert Landreth. I have two
21 witnesses this morning.

22 EXAMINER BROOKS: Very good. The Cases Number
23 13,048 and 13,049 relate to the same half section of land,
24 and accordingly they will be consolidated for purposes of
25 hearing.

1 Will the witnesses please stand to be sworn?

2 (Thereupon, the witnesses were sworn.)

3 EXAMINER BROOKS: Okay, since 13,048 was the case
4 first filed, and you're the Applicant in that case, Mr.
5 Kellahin --

6 MR. KELLAHIN: Yes, Mr. Brooks.

7 EXAMINER BROOKS: -- you may proceed.

8 MR. KELLAHIN: Thank you.

9 Gentlemen, this is not your ordinary compulsory
10 pooling case. It's different in some very important ways.

11 For many months now, Devon has been actively
12 pursuing the acquisition of 3-D seismic data, in order to
13 utilize that information to more definitively pick what to
14 do with the Devonian.

15 The section in question is Section 4. There is
16 an existing well in the north half of 4. Devon is the
17 operator of that well. Their plan and proposal is to
18 deepen that well to the Devonian. They've gone through
19 extensive and exhaustive negotiations with Mr. Landreth and
20 EGL. The end result is, the parties are not able to agree.

21 The fundamental stumbling block that weaves its
22 way through all of the negotiations from start to finish is
23 the fact that Mr. Landreth contends that all of Section 4
24 should be dedicated to a well and that it should be
25 dedicated to 640-acre spacing, as exists in the Bell Lake

1 North-Devonian Pool.

2 This is a science case, it's not a problem with
3 competing pooling cases. Once you make a decision on the
4 science, regardless of what you do on any other issue, the
5 ultimate answer is the answer that you accept with regards
6 to the geology and the engineering data. So we think
7 that's the place to start.

8 We think after you see Devon's presentation you
9 will agree with Devon that the right answer is granting
10 Devon's pooling Application and denying that of EGL.

11 We're prepared to go forward in that manner, and
12 we'd like to deal with the geologic presentation first.

13 EXAMINER BROOKS: Okay, what is the name of the
14 well?

15 MR. KELLAHIN: It's the Rio Blanco 4 Federal Well
16 Com Number 1. It's an existing well with an API number,
17 it's in Unit Letter F of Section 4.

18 EXAMINER BROOKS: Okay, and do both parties
19 propose to utilize that existing wellbore, or is --

20 MR. HALL: Yes, that's correct, Mr. Examiner.

21 EXAMINER BROOKS: So there's no dispute about the
22 manner in which the unit is to be developed, it's just a
23 question of what land is included within the unit? Is
24 that --

25 MR. KELLAHIN: I think we'll have to let the

1 expert engineer describe the differences, but my
2 understanding is that the well stops at the base of the
3 Morrow --

4 EXAMINER BROOKS: Right.

5 MR. KELLAHIN: -- that it produced from the
6 Morrow for a short period of time, completion was attempted
7 in the Atoka, and that the parties, I think, collectively
8 want to whipstock it and deepen it to test the Devonian.

9 EXAMINER BROOKS: Okay.

10 MR. KELLAHIN: When you go from the north half to
11 include the south half, the percentages are going to
12 change. So what you're going to see is, in the south half
13 Devon has no interest.

14 EXAMINER BROOKS: Okay, you may proceed.

15 MR. KELLAHIN: Our first witness is Mr. Jim
16 Hager.

17 JIM HAGER,

18 the witness herein, after having been first duly sworn upon
19 his oath, was examined and testified as follows:

20 DIRECT EXAMINATION

21 BY MR. KELLAHIN:

22 Q. Mr. Hager, for the record, sir, would you please
23 state your name and occupation?

24 A. My name is Jim Hager. I'm a senior geophysical
25 advisor for Devon.

1 Q. In what city do you reside?

2 A. Edmond, Oklahoma.

3 Q. Would you summarize for us your education?

4 A. I received a BS in geology from Akron University
5 in 1980, an MS in geophysics from Wright State in 1982.

6 Q. Would you summarize for us your employment
7 experience as a geophysicist?

8 A. I worked for Chevron USA from 1982 to 1998 and
9 Snyder Oil from 1998 to 1999, EEX Corporation from 1999 to
10 2000, and then Devon since December of 2000 to the current
11 date.

12 Q. When we look at Section 4, is there available to
13 you now seismic data that you can analyze?

14 A. Yes, there is.

15 Q. Is that data now what we would characterize 3-D
16 seismic information?

17 A. Yes, it is.

18 Q. Have you examined that information from start to
19 finish?

20 A. Yes, basically I have.

21 Q. Have you satisfied yourself that the methodology
22 used to gather the data was appropriately done?

23 A. Yes, it was.

24 Q. Have you satisfied yourself that the protocols
25 applied for the gathering of the data were satisfactorily

1 accomplished?

2 A. That's correct, yes.

3 Q. Have you satisfied yourself that the raw data has
4 been properly processed and analyzed?

5 A. Yes, it has.

6 Q. Is all this information available to you in
7 making a decision about the Devonian in this area?

8 A. Yes, it was.

9 Q. Is this seismic data part of what I would call an
10 area or a global review of seismic information?

11 A. Yes, it is. It's a larger 3-D data set.

12 Q. And when we focus down on the issue between the
13 Devonian that you're identifying in Section 4 and the
14 Devonian that's been produced in Section 6 to the west,
15 have you certain opinions on the relationship between those
16 two areas?

17 A. Yes, I do have.

18 Q. Do you have experience in analyzing geophysical
19 data not only for Devonian but for other formations?

20 A. Yes.

21 Q. Have you attempted to calibrate your geophysical
22 data with known conventional geology?

23 A. Yes, I have.

24 MR. KELLAHIN: We tender Mr. Hager as an expert
25 geophysicist.

1 MR. HALL: No objection.

2 EXAMINER BROOKS: So accepted.

3 Q. (By Mr. Kellahin) Mr. Hager, when we get to the
4 ultimate conclusions of your work, what opinion do you have
5 with regards to whether or not the well in Section 4 is a
6 wildcat well, separate and apart from any other pool?

7 A. The 3-D, I believe, clearly shows that they're
8 separated, and it is an exploration well separated from the
9 reservoir in Section 6.

10 Q. When did Devon first initiate its efforts to
11 acquire 3-D seismic data for this specific area and a large
12 area around that? When did that start?

13 A. That began in the latter part of the year 2000.
14 WesternGeco was looking for someone to underwrite a 3-D
15 survey out in this area. We were interested in this area.
16 This was an area that for a long time there had been ideas
17 about Devonian and different type of plays. There was a
18 lot of Devonian production out in this area, so that was
19 one of the drivers behind trying to get 3-D out here.

20 And our understanding of it is, the Devonian is a
21 structurally controlled play, four-way closures. 3-D
22 seismic data lends itself beautifully to trying to find
23 these type of structures and identify these kind of
24 prospects. So that's why we pursue the 3-D data.

25 There's a signed AFE that we got from our

1 management in the year 2001, January, 2001, that shows
2 where we got the money to go forward to underwrite this 3-D
3 survey.

4 Q. Have you always been a part of that process?

5 A. No, I wasn't, actually. I joined Devon in
6 December of 2000. The process was already starting to move
7 forward at that point, and then I took it over. But it was
8 before the data was shot. I worked with the WesternGeco
9 geophysicist in making sure the parameters were set up
10 properly for acquisition and that we had the proper
11 processing parameters in place. So that's where I came in.
12 And we got the okay within our company. The display here
13 talks to that.

14 Q. At this point is the 3-D seismic data that is
15 commercially available so that if Mr. Landreth or EGL
16 wanted to use that data, they could acquire the right to
17 use it?

18 A. Yes. Yes, it's been on the market since July of
19 2002.

20 Q. When you look at 2-D seismic data, is there some
21 2-D seismic data available in this area?

22 A. There's a few lines that I'm aware of.

23 Q. Can you compare the difference from your
24 perspective as an expert between the 2-D seismic data and
25 having 3-D seismic information for targeting the Devonian?

1 A. Yes, 2-D has some real problems, because the
2 assumption of 2-D seismic data is that everything that
3 you're imaging is directly below that seismic line. If you
4 have large structures that are off below where you are, the
5 sound waves going down are going to bounce off these
6 structures and come back up, and you're going to assume
7 they're below you. So a lot of times you'll misplace where
8 these structures are.

9 2-D doesn't have quite the noise suppression or
10 the multiplicity of taking samples of these different
11 horizons, which give you a better noise-to signal ratio,
12 and it results just in a better image, better overall
13 image, with 3-D data.

14 So 3-D is definitely, by far, a much better tool
15 to use to look for structural plays particularly.
16 Stratigraphic plays are also enhanced with 3-D data.

17 Q. When we look at conventional log data and
18 conventional geology, are you going to be able to use that
19 to the extent that you could determine what to do with any
20 Devonian potential in Section 4?

21 A. Conventionally, there's so few points of control
22 that you really cannot map this up properly with -- There's
23 just a few points of control to be able to map out what the
24 structural picture looks like.

25 However, sonic logs that were recorded in these

1 wells, you can make a synthetic seismogram from the sonic
2 log and then tie it to your seismic, and that's the proper
3 way to do it. And here we have excellent synthetic ties to
4 our seismic data, so we're really confident that we're on
5 these different events, we're on the Devonian. We can see
6 it very clearly because there's such a large velocity
7 contrast from the overlying Woodford shale to the
8 underlying very fast Devonian, so you know exactly where
9 you are. And you can map this out very -- with a lot of
10 confidence, you can map out the Devonian structure out
11 here.

12 Q. After we look at your supporting information and
13 how you reach your conclusion -- and we'll do that in a
14 second -- summarize for us what is your conclusion as a
15 geophysicist.

16 A. My conclusion is that timingwise we're already
17 pursuing this at the end of 2000, and we have the paperwork
18 and the e-mails and so on to just show the progress of
19 following this -- the idea through the shooting of the 3-D
20 data.

21 Structurally, there's no doubt in my mind these
22 two areas are separated structurally. 3-D data clearly
23 shows this. I have a lot of confidence in the 3-D
24 interpretation because of the excellent tie between the
25 well logs and the 3-D seismic data.

1 Q. Have you worked in association with Mr. Steve
2 Hulke?

3 A. Yes, I have.

4 Q. Steve is Devonian's geologist that deals with the
5 conventional geology?

6 A. That's correct.

7 Q. Have you and he worked to put together a
8 composite map that not only shows some of the conventional
9 data but also includes helping him pick these lines of
10 faulting on this display, which we'll identify later, but
11 for purposes of the record we've been looking at Exhibit
12 B-1?

13 A. That is correct.

14 Q. So that represents part of your work and his
15 work?

16 A. That's correct.

17 Q. Well, let's go back to the beginning. If you'll
18 look at Exhibit A-1, lead us through the process that Devon
19 has been engaged in to gather the appropriate data so that
20 you could then look at it and make decisions about Section
21 4.

22 A. Okay. At the very beginning it just shows a plat
23 that displays where WesternGeco's 3-D spec seismic is
24 available to anyone who wants to purchase it, in New Mexico
25 and Texas. The red circle shows where the southwest Lea

1 Phase 1 3-D survey is and where -- the area that we're
2 talking about here.

3 The second page is just kind of -- It's just a
4 blow-up, just to show the southwest Lea area again, just to
5 show where this 3-D survey is located. I believe the area
6 covered is about 177 square miles.

7 And moving forward to the third page, this
8 shows -- at the end of the year 2000 it shows a plat where
9 at that time we were working with the WesternGeco
10 geophysicist to set up proper acquisition parameters,
11 shotline spacing, geophone spacing, the number of
12 geophones, all those type of things. So again, the circle
13 kind of circles us in now to the area that we're talking
14 about, Section 6, Section 4.

15 The next one is an e-mail, and this was from
16 Martha George, and she is the sales rep for WesternGeco,
17 and she would weekly send us updates to any of the
18 underwriters of the 3-D survey. And at this point they had
19 already started the survey.

20 There was a delay between when we actually
21 underwrote the survey, which was -- we got the signed AFE
22 in house in Devon in February -- actually it was February
23 8th, I think, we had it signed, of 2001 -- between that
24 point and when they had permitting done and were able to
25 start acquiring the survey. They started acquiring it

1 Friday, July 13th of 2001. And it just talks about the
2 different sweep tests and things that normally occur when
3 you're shooting 3-D data, when they're -- just get out in
4 the field at the very beginning.

5 The next page shows when it was completed. They
6 completed acquisition on November 17th of 2001. The data
7 -- They spent a lot of time on porosity and they spent a
8 lot of time on refraction statics. Refraction statics are
9 very important, because near-surface information or near-
10 surface velocity contrast can cause different effects in
11 the subsurface.

12 So between November 17th, and on the next page it
13 shows July 23rd, 2002, is when they finally released the
14 final processed 3-D data. So that's when we finally got
15 the data shipped to us.

16 And then the next page shows when we loaded it up
17 to our workstation at Devon, which was on July 30th, 2002.
18 We started working the data at that point.

19 Q. Let me shift gears then. Let's look specifically
20 at Section 4 so that we can examine the basis for your
21 conclusion that the Devonian in Section 4 is separate and
22 distinct from the Devonian that's produced in the well in
23 6. Okay?

24 A. Okay, what this display shows on the left is a
25 Devonian depth structure map. It covers Section 6, Section

1 5, Section 4, Section 7 and Section 8. The contour
2 interval is 50 feet, the scale here is one inch is equal to
3 1000 feet.

4 And what we can see is that from the 3-D data
5 we've mapped out what you would call a pop-up feature.
6 It's structurally controlled. There's a fault to the west
7 and a fault to the east. It's up in the center, and this
8 is where the North Bell Lake field is located.

9 There's a syncline that you can easily map, and
10 I'll illustrate here in a second with a seismic line. And
11 then you climb up on the structure off to the east. This
12 is the Rio Blanco, and you can see the Rio Blanco Number 4
13 Fed 1 well -- or 4 Fed Number 1 well, in Section 4.

14 The seismic line is shown on the map. It goes
15 from west to east and then south to north and then west to
16 east, and it ties --

17 Q. Yeah, before you get into --

18 A. Sure.

19 Q. -- the right portion of the display, we'll come
20 back and look at that in a second. But look first of all
21 on the left side --

22 A. Uh-huh.

23 Q. Where we had the bird's-eye view, looking down on
24 the feature.

25 A. Uh-huh.

1 Q. When we look on the far western side in Section
2 6, Section 6 is approximately split east-half/west-half
3 with this fault line.

4 A. Right.

5 Q. Can you identify the fault line shown on your
6 exhibit and orient it to the fault line that's shown on
7 Exhibit B-1? Would you do that for me?

8 A. Sure will. That fault up to the west is this
9 fault right here.

10 Q. It's the first fault immediately to the east of
11 what is characterized as the Bell Lake fault?

12 A. That's correct, Bell Lake fault and then the
13 first fault here.

14 Q. Have you examined the geophysical data, the 3-D
15 seismic information, to give yourself enough varying
16 snapshots of the reservoir to satisfy yourself that you've
17 accurately depicted the location of the fault we're talking
18 about?

19 A. Yes, very accurately. We have 110-foot bin
20 spacing. That means that every 110 feet across this entire
21 area we have a sample, we have a trace, so we can map it at
22 those points. So very accurately you can nail down where
23 these faults are.

24 Q. Did you do the same thing for the fault that's on
25 the eastern edge of the North Bell Lake-Devonian Pool? Do

1 you see that line?

2 A. Yes.

3 Q. That's in the western portion of Section 5. Show
4 that again.

5 A. Sure, that would be this fault right here, then.
6 And the same approach was taken.

7 Q. Let me confine you to the three penetrations that
8 are shown on this display that are in the North Bell Lake-
9 Devonian Pool, starting first with the Bell Lake Unit A/C 6
10 well. Do you see that?

11 A. Uh-huh.

12 Q. That's the big well, right?

13 A. That's correct.

14 Q. When you go east of that well you get the Bell
15 Lake Federal 2?

16 A. That's correct.

17 Q. These footages in relation to each of those
18 wells, what are those?

19 A. The footages are subsea values. It's taking the
20 measured depth minus the Kelly bushing, and you come up
21 with a value -- reference to a sea-level datum. Those are
22 negative numbers.

23 Q. And then north of that, inside the red circle, is
24 the North Bell Lake Federal 3?

25 A. Right.

1 Q. There's a number associated with that?

2 A. Right, again the same thing applies.

3 Q. So fit all three of those together with your
4 seismic information and tell us what kind of feature we're
5 looking at?

6 A. Basically we're looking at a top of a structural
7 feature. They're all very close in depth to one another,
8 and not much difference between the three of them, but
9 they're all sitting on the very top of this structural
10 feature.

11 Q. Now take us to the east of that pool and show us
12 how you've concluded that there is a disconnect between
13 Section 6 and Section 4.

14 A. Sure. As you come across to the east, we drop
15 off on the down side of that fault, and it falls off into a
16 syncline. And then it climbs back up on another structure,
17 the structure that we're -- our prospect structure, off to
18 the east.

19 Q. Are you satisfied that there is enough
20 displacement between the two structures with this low
21 trough in Section 5 --

22 A. Yes.

23 Q. -- to separate the hydrocarbons?

24 A. Yes, I am. There's the fault -- What is
25 juxtaposed across the fault from the porous Devonian,

1 somewhat porous Devonian, is the Woodford shale, which is a
2 nonporous, nonpermeable formation that acts as an excellent
3 trap across the fault.

4 Q. When we're looking at the Bell Lake 6 well in
5 Section 6, what kind of reservoir are we dealing with? Is
6 this a sand reservoir or a carbonate? What is this?

7 A. It's a carbonate reservoir.

8 Q. I see on your display that if you look on the
9 southern portion of it, you've dashed in what is identified
10 as a gas-water contact.

11 A. That's correct.

12 Q. What does that represent?

13 A. That value, minus 11,364, comes from the Bell
14 Lake 6 well. That is the -- the drill stem test -- A
15 series of drill stem tests were taken in that well. We
16 took a drill stem test -- And Steve Hulke will be speaking
17 to this in more detail, he has displays that will show
18 this. But one drill stem test to the next drill stem test,
19 one tested water, one tested gas. We figure right in
20 between is a good place to put the gas-water, and that's
21 how we located it. The distance between the drill stem
22 tests was pretty short. I believe it was just a few tens
23 of feet. So we feel that our gas-water contact is very
24 accurately identified here.

25 Plus we can show that the structure from the 3-D

1 closes off at the faults, which gives us a very good idea
2 of what the container size is for this feature.

3 Q. In determining that these two containers are
4 separated --

5 A. Uh-huh.

6 Q. -- what significance does the gas-water contact
7 have for you in that decision?

8 A. Basically, we see that we would drop -- that the
9 gas-water shows you where the end of the gas column is, and
10 that by going across the syncline and then up on the next
11 structure we are separated, we are structurally separated,
12 and the gas-water contact will show -- is a value that
13 definitely separates the two structures from one another.

14 Q. One of the things that Examiner Brooks will need
15 to do in a pooling case is make a decision about what risk
16 factor penalty to award whichever Applicant he deems
17 appropriate to issue the approval for. Mr. Hager, do you
18 have an opinion about whether the maximum 200-percent risk
19 factor penalty is appropriate for the re-entry of the well
20 in Section 4?

21 A. Yes, I believe it is. There's risk associated
22 with this, this is an exploration well.

23 Q. Has that risk been diminished to the point that
24 the risk is less than 200 percent because you now have 3-D
25 seismic information?

1 A. No, I don't believe so.

2 Q. Let's go to the right side of the display, and
3 we're now looking at a vertical section?

4 A. That's correct.

5 Q. We've shifted from a footage-based display, and
6 now we're looking at a map that is done in components of
7 time?

8 A. That's correct.

9 Q. Before we talk about the conclusions, let's talk
10 about how you do this.

11 A. This is a -- From the workstation you can take a
12 section out of it in any direction you want. Most -- A lot
13 of people call those arbitrary lines, and that's basically
14 what this line shown on the map is, it's an arbitrary line
15 tying the Bell Lake 6 and the Rio Blanco Number 1 wells.

16 And what it illustrates is what is shown on the
17 map, that we have a structural feature, we have the Bell
18 Lake 6 well, penetrates the Devonian, which is purple on
19 this seismic line. We drop down on the down side of the
20 fault heading to the east. There's a syncline that
21 separates us.

22 Then we hit another fault which is up to the
23 east, and that's where our prospect is, that's where our
24 structural prospect is. And you can see the structure over
25 to the east is actually a little bit higher than the one at

1 North Bell Lake field.

2 And the Devonian -- the seismic data -- the
3 quality of it is really very good, I think. It's very easy
4 to map. The events are pretty -- are very continuous, and
5 it's just -- it's a good data set to work with.

6 Q. As you're aware, Mr. Hager, there has been an
7 ongoing discussion between Devon and Mr. Landreth about
8 disclosing to Mr. Landreth the 3-D seismic data.

9 A. Uh-huh.

10 Q. You have not shown all the data, have you?

11 A. Oh, no, this is just one line, one cut from the
12 3-D data set.

13 Q. And until such time as Mr. Landreth or EGL
14 decides to help pay for that --

15 A. Uh-huh.

16 Q. -- you prefer that that not be disclosed?

17 A. That's correct. We have a contract and we have a
18 -- you know, signed with WesternGeco that we're limited as
19 to what we can show and so on.

20 Q. Do you have a waiver from the geophysical company
21 so that --

22 A. Yes --

23 Q. -- you could select a line that you think is
24 representative, and fairly representative, of the point --

25 A. Uh-huh.

1 Q. -- that Section 4 Devonian is separate and
2 distinct from the Devonian in Section 6?

3 A. Yes.

4 Q. And is the line we're looking at such a line?

5 A. Yes, this is the line.

6 Q. When you look at the top part of the line, I want
7 to see where you get this -- is every vertical black line
8 -- Well, I guess what I'm looking for is, how do I know --
9 where do I find the 110 feet between lines?

10 A. Okay, the trace is on here. Every trace, every
11 squiggle coming down, the distance between each one is 110
12 feet.

13 Q. And above that is regularly spaced a short
14 vertical dashed line. What is that?

15 A. Those are just locators. You can display your
16 seismic any way you want. I work on a Landmark Seisworks
17 workstation, or the software that we're using, and that
18 just shows shot-point tick marks. So those are maybe 10
19 apart, whatever.

20 Q. Well, it sort of keeps you oriented in all this
21 stuff?

22 A. Yeah, it sure does, keeps you located.

23 Q. The actual data you're looking at is related to
24 the squiggle line?

25 A. That's correct.

1 Q. All right, let's project down into the seismic
2 time map, the Bell Lake A6 well.

3 A. Uh-huh.

4 Q. As we start at the top, we're moving down with
5 the yellow line, and we get to certain points where the
6 color-coding on the horizontal lines changes, and you have
7 black horizontal lines that are intersected with the
8 yellow, and you're moving on down.

9 A. Uh-huh.

10 Q. Get down to about 200 feet on the yellow line and
11 start telling me the significance of the color codes as you
12 proceed down the wellbore.

13 A. Okay, it's 2000 milliseconds, it's a time marker.

14 Q. Oh, I'm sorry, it's not a --

15 A. That's fine, I just wanted to --

16 Q. -- it's a time.

17 A. -- and the interval here is, you know, 100-
18 millisecond intervals on the vertical scale.

19 The colors really don't have any significance
20 other than what we're trying to do was, we were trying to
21 make it easier to see different formations that we could
22 tie in with our synthetic, and we have a display on that
23 later. But just to show -- just a breakout in different
24 formations as you head down, to make it easier on the eye
25 just to see what we're picking -- how we interpret this

1 data and how we map it.

2 Q. Okay. So when we get down to what the legend
3 tells us on the far right is the lower Morrow, you have
4 color-coded that with the light red?

5 A. Uh-huh, that's correct.

6 Q. And then we get down into the Mississippian lime,
7 and that is the blue?

8 A. That's correct.

9 Q. And then you drop down into the purple, and
10 that's the Devonian?

11 A. That's right.

12 Q. Show me how you have utilized the log data from
13 the Bell Lake Unit 6 well to allow you to minimize the
14 uncertainty about the seismic data.

15 A. Okay.

16 Q. Show me how you do that.

17 A. Okay, I need that -- Do you want to do the third
18 display? That's where I would do the tie.

19 Q. Okay.

20 A. That would be a good way to do it. Okay, on this
21 display --

22 Q. Let's identify for the record what we're looking
23 at. We're now looking at the exhibit you prepared that is
24 A-3.

25 A. The title of that is "Schematic Model of Rio

1 Blanco Devonian Prospect". What we have here is, we have a
2 piece of that seismic that we were just looking at before,
3 that goes across the Bell Lake 6 well. And the colors are
4 removed now, but you can still see the events as you come
5 down.

6 The sonic log that was recorded in that well is
7 shown off to the right there, on sonic and the gamma-ray.
8 And what I've put in the sonic log, as you come down it I
9 have slow, fast, slow, fast. It just gives an indication
10 of where there are strong boundaries. The lower Morrow and
11 Barnett shale siliciclastics come in contact with the
12 Mississippian carbonate down at about 2.08 seconds, over in
13 that center synthetic section there, you can see that. And
14 it generates a large peak.

15 And if you travel over to the seismic line, you
16 see that there's a large peak right there. That's our
17 Mississippian top. It's an excellent tie.

18 Then we come down and we come through the fast
19 Mississippian carbonates into the slow Woodford shale, and
20 you can see it generates a strong trough. And then if you
21 travel to the seismic data, you can see that we have a
22 trough over there that we're correlating to that Woodford
23 shale.

24 And likewise as you head down to the Devonian
25 from slow to fast, again generates a strong peak. And we

1 see that peak in the seismic data, so that's our Devonian.
2 It's really a very good tie.

3 So we're locked into where the Devonian is, and
4 then we take that point and we can map it out from there.

5 Q. Okay, before you shift gears now --

6 A. Sure.

7 Q. -- let's go back and look at A-2 again.

8 A. Uh-huh.

9 Q. We've looked at the right-hand portion of the
10 display, and you have tied in the Bell Lake Unit 6 well.

11 A. That's correct.

12 Q. Come back in on Exhibit 2-A and walk us through
13 the Rio Blanco 4 well, which is the subject well that you
14 want to deepen now to the Devonian.

15 A. Right.

16 Q. Is the log of that well, even though it stops at
17 the base of the lower Morrow, a useful tool by which it can
18 aid you in your evaluation of the 3-D seismic data?

19 A. Oh, it sure can. I mean, I'm only showing a
20 little portion here on this display, but as you go uphole
21 there are other events that are just as strong a boundary.
22 The Bone Springs is an example where you can just lock
23 yourself in and you know where you are. The Atoka is
24 another one where you can lock in and really figure out
25 where you are.

1 Likewise, I did this with the Rio Blanco. We
2 have a sonic log in that well, and that one is hung also in
3 relationship to the Continental or the Bell Lake 6 well.
4 So you can see here's the lower Morrow event which we see
5 in the Bell Lake 6 well, and so we know relatively where we
6 are to the base of that well on the seismic data.

7 And you can see on the A-2 display where the
8 yellow line comes down and has a little horizontal tick,
9 that's where the well projects in when you tie it in with
10 synthetic. So then you know pretty much how much further
11 you need to go down to the Devonian from that point to
12 deepen it to hit the Devonian.

13 Q. All right, come back to Exhibit A-2. Start on
14 the far left, down in the Devonian. And moving to the
15 east, or to the right, walk us through the Devonian so that
16 we can understand your conclusion about the separation
17 between North Bell Lake-Devonian and the Devonian in the
18 Rio Blanco 4 well.

19 A. Sure --

20 MR. HALL: Mr. Examiner, if you would allow me,
21 at this point I'd like to interpose an objection for the
22 record in view of the scope of the hearing, which is
23 determined by the Devon Application. This is nothing more
24 than the standard compulsory pooling case.

25 We've heard quite a bit of testimony involving

1 seismic data about an apparent discontinuity between
2 Section 4 and Section 6. We question the relevance of that
3 in this proceeding. After all, it is only a compulsory
4 pooling proceeding.

5 If it's Devon's purpose here today to try to
6 convert the scope of this hearing into a pool rules hearing
7 or a nomenclature hearing to establish a new pool, for the
8 record we do not consent to proceeding in that fashion.

9 So that is the relevance objection, Mr. Examiner.

10 MR. KELLAHIN: Mr. Examiner, may I respond?

11 EXAMINER BROOKS: You may respond, Mr. Kellahin.

12 MR. KELLAHIN: We're setting up the science on
13 establishing the appropriate risk factor penalty. In
14 addition, Mr. Hall and his client have contended that this
15 is not a wildcat. In order to proceed with what the
16 Division believes is a wildcat when we talked to Mr. Kautz,
17 the Division has approved our project. We have the
18 approvals and the forms from the BLM to do the work, and we
19 want to demonstrate to you it's a viable project using the
20 seismic data.

21 And like I said in the beginning, that is the
22 fuss. It's what spacing unit applies. In order to have a
23 scientific basis for your decision, we want you to see
24 this, recognizing that the ultimate answer will also affect
25 your decision on the risk factor.

1 EXAMINER BROOKS: Okay. Well, I am inclined to
2 agree with Mr. Hall on the question of relevance. However,
3 I will allow the Applicant to proceed to make their record
4 in the manner which they think is appropriate, and we can
5 roll these relevancy arguments into final argument in this
6 case.

7 Thank you. You may continue.

8 Q. (By Mr. Kellahin) Starting on Exhibit A-3, Mr.
9 Hager, if you'll go down to the Devonian, and starting with
10 the western side of the Devonian feature, take us from west
11 to east through that interval and tell us how this
12 information supports your conclusion that they're
13 separated.

14 A. Okay. Are we on Exhibit A-2 or --

15 Q. I'm still on A-2.

16 A. A-2, okay. Again, we tied into the Devonian with
17 a lot of confidence from our synthetic tie, so we have that
18 event right there that we're tracking.

19 We cross the fault to the east and we just track
20 along that event. And you can see the character
21 correlation. The way that we -- you know, we do this is,
22 we just look at the character correlation. We go from well
23 to well to make sure our ties are correct and then use
24 character correlation in between. And character
25 correlation is really -- looks very straightforward here.

1 Dropping down, follow the Devonian across. And
2 then upthrown on the other side of that fault, over to the
3 Rio Blanco Number 1 well. You can see the structure there
4 where we're mapping the Devonian.

5 Q. As a geophysicist, then, how strong is your
6 belief that Section 6 and Section 4 are disconnected?

7 A. It's very strong. You know, I would --
8 Basically, we've recommended it to management, we've said
9 that this is a prospect that we really believe in, and
10 we've staked our -- basically our reputations and things on
11 it, that this is something that we really stand behind. I
12 firmly believe that they're separated.

13 MR. KELLAHIN: Mr. Examiner, that concludes my
14 examination of Mr. Hager. We move the introduction of his
15 Exhibits A-1, -2 and -3.

16 EXAMINER BROOKS: Objection?

17 MR. HALL: No objection.

18 EXAMINER BROOKS: A-1, -2 and -3 are admitted.

19 Mr. Hall?

20 CROSS-EXAMINATION

21 BY MR. HALL:

22 Q. Mr. Hager, I wonder if you could explain to us
23 what relevance your testimony has with respect to
24 communication between Section 4 and Section 6 has to this
25 compulsory pooling proceeding.

1 MR. KELLAHIN: I'm going to object to the
2 question. He's asking this geophysicist for a legal
3 opinion. This is your thing to decide, Mr. Brooks.

4 EXAMINER BROOKS: Yeah, I am really inclined to
5 sustain that objection. I don't sustain objections very
6 often in the context of a Division Examiner's hearing, but
7 I do believe that it is a legal question rather than a
8 question -- interpretation of the OCD Rules, rather than a
9 question of geology or geophysics, so I'll sustain the
10 objection.

11 Q. (By Mr. Hall) Mr. Hager, I wonder if you could
12 clarify for us, when did Devon first start to acquire
13 seismic data in this area for your study?

14 A. Okay, it was WesternGeco, is the spec company,
15 right? And the data actually -- the actual seismic data
16 when they put the vibrators on the ground and started after
17 it, was on July -- let's see, I think it was July 17th --
18 No, July 13th is when they first began collecting data,
19 2001.

20 Q. All right. Is that after the point in time when
21 EGL Resources brought this re-entry proposal to Devon, do
22 you know?

23 A. When was that?

24 Q. Well, do you know, is the question.

25 A. I don't know when the date was for the EGL. Do

1 you know what that is? I'm sorry, I don't want to ask
2 questions back, but I don't know how to --

3 Q. I understand. If you don't know, that suffices.

4 A. Right, right.

5 EXAMINER BROOKS: I'm sorry, I didn't get the
6 date that you said, that you gave us just a minute ago.

7 THE WITNESS: July 13th, 2001.

8 EXAMINER BROOKS: Thank you. You may continue,
9 Mr. Hall.

10 Q. (By Mr. Hall) What were your instructions from
11 management for undertaking your geologic and geophysical
12 study of this area?

13 A. Basically, the way that we work it in Devon is
14 routine-based, and we make recommendations to management on
15 projects that we want to pursue. This is a project that we
16 felt pretty strongly about. When I joined Devon at the end
17 of 2000, it was already something that people had that they
18 wanted to pursue.

19 And the Devonian isn't the only prospect that
20 we're looking at out here. There's others, you know. So
21 we wanted to get seismic in this area to cover all that.
22 So we just -- we carried that forward, you know.

23 At that point we brought forward our
24 recommendation to our management, and -- That's what we
25 did, and we had an AFE that we needed signed to underwrite

1 this 3-D survey, to pay our share of it, and that was
2 signed February 8th, I believe, of 2001.

3 So at that point we moved forward. I was the
4 project geophysicist, so I was responsible for watching the
5 acquisition was done properly, processing was done
6 properly, and data was loaded and then data was
7 interpreted.

8 Q. Was it the land department member of your team
9 that asked you to study this area?

10 A. No, it was not.

11 Q. Do you know who it was?

12 A. No, basically it was -- it was basically
13 geologic. It was more of a geologic idea out here. And I
14 don't know who specifically brought it up, but I mean it
15 was an obvious area to look for Devonian because there's
16 80-plus BCF produced to this date. So we thought this area
17 was highly prospective.

18 And with just a few 2-D lines around, we knew we
19 weren't going to be able to locate where these structures
20 were without 3-D. So that was part of the reason to shoot
21 the 3-D over this.

22 Q. When you started your study, did you have any
23 other geologic or geophysical information from any third
24 parties that you looked at?

25 A. Not to my knowledge, no.

1 Q. All right. Did you look at any of the geological
2 information that Mr. Landreth or EGL Resources brought to
3 Devon?

4 A. No, I never did.

5 Q. Let me ask you about your Exhibit A-2 briefly.

6 A. Okay.

7 Q. If you look at your time-line display on the
8 right side of the exhibit --

9 A. Uh-huh.

10 Q. -- let's see if I understand this correctly.
11 First of all, would the Morrow deposition you've shown
12 there be reflective at all of what you would expect to
13 encounter in the Devonian as well?

14 A. Oh, no. No, the Morrow is a siliciclastic
15 section, quartz sands and shales. The Devonian is a
16 different beast, it's a carbonate.

17 Q. All right. Well then, perhaps you can explain to
18 me why if we look at your depiction of the lower Morrow on
19 that display, you show a thickening to the east; is that
20 correct?

21 A. Well, this is very diagrammatic, I have to admit.
22 It was colored just for the sake of trying to key the eye
23 into where the events were and how we interpret this data.
24 So I wouldn't read much into that. We don't have an
25 isopach that represents what you're saying.

1 Q. All right. Well, would I be incorrect to say
2 that the way you have depicted the Morrow as thickening to
3 the east is inconsistent with your structural display on
4 the left side?

5 A. No, I wouldn't. No, I think it's totally
6 consistent.

7 Q. Staying on the left side of the exhibit, your
8 structure map again, you show the northwestern-trending
9 fault line across Section 5 there.

10 A. Uh-huh.

11 Q. Can you explain to me where this is shown in your
12 time-line --

13 A. Right.

14 Q. -- display? It's not apparent to me.

15 A. Okay, if you -- okay, come to the A-6 well, and
16 then come over -- If you look at the top, the little ticks
17 up there, come over four ticks. Do you know where I am?

18 Q. Yes.

19 A. Okay, and then go straight down to the purple
20 from there. That's the point that you're looking at on the
21 map. Okay? Because we're mapping the purple out on the
22 map, and that's where that fault intersects the Devonian,
23 right there.

24 Q. Is that break obscured by the brown line you're
25 drawn on there?

1 A. A little bit, although I think you can -- you
2 know, to my eye I can clearly see that there is a break
3 that you can carry all the way up through, where you see a
4 discontinuity and -- of a lot of the events, you know, the
5 Devonian and the Woodford shale. Come up to the
6 Mississippian and you see a clear break right there where
7 you have the dark event coming where it has MPLM at the A6
8 well. Bring it to the fault and then drop down as you head
9 to the east. There's a clear break there. This looks like
10 a really -- a real good fault pick to me.

11 Q. So the best indication of the break is up at the
12 base of the Mississippian; is that correct?

13 A. That's a very good indicator. I think the
14 Woodford shale has a really good indicator also. And the
15 Devonian does too, actually. I mean, there's -- All the
16 way up the section, if you go up to the lower, to the
17 middle Morrow, there's -- in that light-pinkish area it
18 looks like a really clear break right there also.

19 Q. But you'd agree it's less clear as you get down?

20 A. It actually looks like it's dying out or
21 splintering off, whatever, as you get up, shallow, above --
22 into the Morrow.

23 Q. And your placement of the break is your
24 interpretation, correct?

25 A. That is correct, yes.

1 Q. Okay. And as you get down into the Devonian the
2 break is hardly apparent at all; isn't that right?

3 A. No, I kind of disagree with you. I see it -- if
4 you look at the brown -- or the line that we used here to
5 show the Devonian top, it hits the brown, and then you drop
6 down to the east. Structurally, the way -- this area, the
7 way the general thinking is out here and what it says in
8 the textbooks and what general thinking in industry is, is
9 that a lot of the structure had occurred after the
10 Devonian, so that a fault that you can clearly see in the
11 Mississippian, you know, would -- you would think would
12 carry down into the Devonian, because it would have
13 occurred after the deposition of both those stratigraphic
14 units.

15 So I feel very strongly that there's an equal
16 break. As much of a break as I see at the Mississippian, I
17 would expect that same amount of break at the Devonian.
18 Otherwise, it wouldn't be structurally a sound idea if you
19 didn't do that.

20 Q. Let's look at your Exhibit A-3 real quick so we
21 can compare --

22 A. Okay.

23 Q. -- your interpretation of where these breaks are
24 shown. If you look at your time-line display on the left
25 side of the exhibit, it shows the fault that you show

1 located to the west of the Bell Lake 6 well, off the
2 Devonian, reflected quite clearly, does it not?

3 A. It sure does.

4 Q. And are you saying that the fault break for the
5 faults you're showing in the middle of Section 5 is as
6 clear as that?

7 A. Well, no, it doesn't look that clear on this
8 line, does it? And I agree it doesn't look that clear.
9 But if you look -- if you have the seismic, if you have all
10 the 3-D seismic and you look along here, there's no doubt
11 there's a fault there. Here it's not as clear, but there's
12 other lines where you get the opposite effect, where it
13 looks clearer on the east side than it does on the west
14 side.

15 Q. Yeah. And again, that's your personal
16 interpretation?

17 A. That's correct.

18 Q. Let me ask you, is there some reason you didn't
19 map down into Section 18 to show that Devonian well down
20 there?

21 A. Section -- Okay, so it's the next row down, I
22 guess. Is that correct?

23 Q. Yes, sir.

24 A. Okay, that would be this -- that well right
25 there. Oh, we did, though, we mapped this entire area with

1 3-D data. And that's what -- basically the outlines you
2 see there are based on 3-D data. So yeah, we've covered
3 that.

4 Q. In your geophysical evaluation, did you look to
5 see whether or not there were any sort of discontinuities
6 between the Bell Lake well in Section 6 and the BTA well in
7 Section 18?

8 A. As far as like faulting, you mean --

9 Q. Yes.

10 A. -- anything like that? I did not see anything
11 apparent between the two --

12 Q. Okay.

13 A. -- so I didn't map any faults in there.

14 Q. All right, nothing apparent in there then.

15 Do you have an opinion whether or not those two
16 wells are producing from a common reservoir?

17 A. My guess is they're not, because it looks to me
18 like you can clearly show the gas-water contact in the
19 North Bell Lake field, which looks to me like it's separate
20 from the gas-water contact to the south. So I wouldn't
21 think so.

22 And plus another idea I just wanted to bring
23 forward: The faulting pattern probably is parallel to the
24 Bell Lake fault. That's your main structural component out
25 here. So you wouldn't expect your faulting to go east-

1 west, I wouldn't think, particularly for these
2 compressional-type faults.

3 Q. All right. Are you mapping the gas-water contact
4 in Sections 4 and 6 at about the same subsea depth as on
5 Section 18?

6 A. What we see out here is that the gas-water
7 contacts vary. It depends on the structural height and
8 what's closing these different structures off. I don't
9 know. Those two have different water contacts, the way
10 that we're interpreting the data. 4 might have a similar
11 contact. I would imagine it's in the ballpark, plus or
12 minus 100, 150 feet or so. But it's hard to say. There's
13 no well there to give you any idea, so...

14 Q. Do you have an opinion of whether or not the
15 water contacts you see in all three of the wells are from a
16 common water drive mechanism?

17 A. It's possible. That's more of an engineering
18 question, and I don't really have the expertise to answer
19 that one.

20 Q. All right, it's possible then.

21 In acquiring your seismic data in this area, did
22 you encounter any problems with the quality of the data in
23 Section 4 or Section 5?

24 A. Not at the Devonian, I did not.

25 Q. In other depths?

1 A. Yeah, up in the shallow section it varies. But
2 when you get down deeper, the way that the data comes down,
3 you can undershoot a lot of shallow problems. So when you
4 get down here to the Devonian, as you can see on this data,
5 it's -- and above, into the Morrow and the Atoka, the data
6 quality is really excellent. So I had no problems with
7 that.

8 Q. What would have caused that quality degradation
9 in Section 4 and Section 5?

10 A. In -- Down deep, you mean, or --

11 Q. Well, in the shallower depths.

12 A. In the shallower depths? There are different
13 things that happen up at the near surface that -- they
14 cause that.

15 Q. Such as? Do you have an opinion?

16 A. Well, I mean there can be shallow channels, there
17 can be, you know, different formations, things like that,
18 carbonate buildups, sand-shale deposition things that can
19 cause different variations in your data.

20 The way that you get around that, though, and you
21 gain confidence in your 3-D data is, you go to your -- for
22 instance, we have the Bone Springs. It's an excellent
23 marker, we can map that around. We use that as our check
24 to make sure that our data quality was proper below.

25 So I looked at the time map and I looked at a

1 depth map where we have plenty of penetrations. And if the
2 two correspond, you can feel very confident of your deeper
3 data. And that's what we did in this case.

4 Q. And you didn't show the Bone Springs here?

5 A. No, I did not.

6 Q. To overcome the degradation in quality in your
7 data attributable to whatever conditions are in the
8 shallower depths --

9 A. Right.

10 Q. -- does that require you to, quote, manipulate
11 the data?

12 A. What you can do is, when you acquire the data, if
13 you're aware of anything you can set up your shoe to try to
14 take care of any of those kind of problems. Long offset,
15 lots of spatial sampling, these are keys, these are ways to
16 get around that.

17 And that's what we did in this case. We have
18 lots of -- We have a high full data set, we have lots of
19 sample points, 110-foot spacing on the bins. So this all
20 helps the quality of the data.

21 When you process the data, you know, you want a
22 modern processing flow, which is what we used. I mean, we
23 did good refraction statics. That's why the processing
24 took so long to come out of Western, because we kept
25 sending it back telling them, you know, this is not -- we

1 want this quality better, we want it to match -- our Bone
2 Springs time map has to match the depth map. And it
3 wasn't. So we sent it back and sent it back till we got it
4 to match. So then we felt very confident that we got the
5 right picture.

6 So we worked through that whole process from
7 refraction statics, DMO, you know, migration, the whole
8 bit, and then tied the wells synthetically, make sure
9 they're tied in properly. And I think we have a real good
10 data set out here now.

11 Q. Let me make sure I understood you correctly. One
12 of the problems you encountered in your dealings with
13 WesternGeco is a velocity problem; is that correct?

14 A. No, it wasn't really a problem, but it was an
15 iterative process between the two of us where they would
16 send out a product, and then we would look at it, analyze
17 it and then say, Okay, we think this needs to be done to
18 it. So it went back and forth a couple times between us.

19 Since we were one of the main underwriters, you
20 know, we took the responsibility to make sure the data set
21 was processed properly.

22 Q. Based on your experience, obviously quite
23 extensive, are there problems in picking a well location or
24 pursuing a re-entry like this one based on seismic data
25 alone?

1 A. Well, again, I go back to the ground truth, to
2 me, is the wells. You know, when I tie my wells into the
3 seismic and I get very good ties, you know, I can believe
4 the seismic.

5 And in this case I had those excellent ties, so I
6 feel here we have an excellent location to drill. This is
7 a great place to drill a well for the Devonian, there's no
8 doubt.

9 Q. Now, is Devon's decision to proceed with this re-
10 entry based primarily on the seismic?

11 A. Yes.

12 Q. Have you ever seen a case where the seismic has
13 been completely wrong?

14 A. You know, I think -- in 3-D I can't think of many
15 cases. 2-D is where I see that happen a lot. And again it
16 goes back to that problem with, you know, structural things
17 out of the plane, out of the plane, so to speak, and just
18 not properly processed and so on. 3-D gets around a lot of
19 those problems.

20 Q. Do you know if Devon's drilled any dry holes
21 based on its 3-D or 2-D seismic data?

22 A. Not for the Devonian that I'm aware of.

23 Q. Any wells at all?

24 A. Oh, I'm sure, yeah, like everybody.

25 Q. Other than some disagreement about the existence

1 and perhaps location of the faults, there's really no
2 disagreement between Devon and EGL and Mr. Landreth about
3 the Devonian geology here, is there? In Section 5 -- 4,
4 I'm sorry.

5 A. In Section 4? As far as it being prospective,
6 no, I don't think so.

7 Q. Okay. Both parties agree that this is a good
8 Devonian location?

9 A. I assume so, yeah. I know we do.

10 Q. Direct your attention back to Exhibit A-2 again,
11 and the fault you show through Section 5, how much throw is
12 there to that fault, in your opinion?

13 A. I would guess it's probably on the order of about
14 -- maybe 50 to 100 feet, is my best guess.

15 EXAMINER BROOKS: I'm sorry, which fault are you
16 inquiring about?

17 MR. HALL: It's in Section 5.

18 THE WITNESS: Is this the one you're talking
19 about, right here?

20 MR. HALL: Yes, sir.

21 THE WITNESS: That one right there, okay.

22 Q. (By Mr. Hall) In your view, is a throw -- a
23 displacement of between 50' and 100 feet sufficient to
24 separate what you believe to be two reservoirs out there?

25 A. I believe so. The Devonian -- My understanding

1 of it is, when you juxtapose it against the Woodford shale
2 not only do you have that great -- you know, that good
3 impermeable zone but there can be smear, fault smear, that
4 also will just seal you right off.

5 So the amount of throw a lot of times probably
6 isn't that important. It's just getting that fault to move
7 that shale against that formation, and it affords an
8 excellent permeability barrier.

9 Q. How big a gas column did they encounter in the
10 Bell Lake 6 well, in the Devonian?

11 A. I don't know off the top of my head. I think it
12 -- well, I don't know -- to tell you the truth, I think
13 it's -- actually, it's probably the difference between
14 their subsea top and the water contact here. So I would
15 say it's probably on the order of 290 feet, it looks like
16 to me.

17 Q. All right. And again, you're seeing a 50-foot
18 displacement at a depth of what, 14,500 feet or so; is that
19 right?

20 A. Well, 50 to 100 feet I would guess, something
21 like that, that's correct.

22 Q. And you'll agree that this reservoir has a water
23 drive component to it?

24 A. It seems to, yes.

25 Q. And is it your view that a 50- to 100-foot throw

1 in the fault is sufficient to seal off the reservoir, even
2 with a water drive as extensive as this one?

3 A. Yeah, I think it is, I really do.

4 MR. HALL: I have nothing further, Mr. Examiner.

5 EXAMINER BROOKS: Okay.

6 MR. KELLAHIN: A couple of follow-up questions,
7 Mr. Examiner.

8 EXAMINER BROOKS: Pardon me?

9 MR. KELLAHIN: Would you like me to go --

10 EXAMINER BROOKS: You have follow-up, go ahead.

11 MR. KELLAHIN: Yes, sir.

12 REDIRECT EXAMINATION

13 BY MR. KELLAHIN:

14 Q. Mr. Hager, did Mr. Landreth or Wes Perry or
15 anyone with EGL ever share with you their geologic
16 interpretations or displays on the Devonian?

17 A. No, they did not.

18 Q. When we look at Exhibit B-1, you have assisted
19 Mr. Hulke in evaluating this. Are you satisfied that the
20 information on this display is accurate?

21 A. Yes, I am.

22 MR. KELLAHIN: We move the introduction of
23 Exhibit B-1.

24 EXAMINER BROOKS: B-1?

25 MR. KELLAHIN: Yes, sir.

1 MR. HALL: No objection.

2 EXAMINER BROOKS: B-1 is admitted.

3 MR. KELLAHIN: No further questions, thank you.

4 EXAMINATION

5 BY EXAMINER BROOKS:

6 Q. I wanted to get this chronology straight, because
7 that could have some possible significance. Did you say
8 that you came to work for Devon in November of 2000?

9 A. It was December, early December, 2000.

10 Q. And they were already working on this prospect at
11 that time?

12 A. That's correct, or at least working on the 3-D,
13 getting 3-D out in this area.

14 Q. Now, what was the next significant event in terms
15 of this chronology here?

16 A. Well, it was getting the AFE signed, or getting
17 the money to be able to underwrite this. And that occurred
18 -- we have -- The signature that signed off on it was
19 February 8th of 2001.

20 So then we had the money to be able to cut the
21 check to Western to be able to start the work.

22 Q. That was the AFE to do this 3-D seismic?

23 A. That's correct.

24 Q. And then they ran it in July of 2001?

25 A. That's right, after permitting and some other

1 things were done, July 13th is when they first started
2 shooting data out there.

3 Q. And when did they finish?

4 A. They finished on November 17th, 2001.

5 Q. And then we go on to November of two thousand
6 and --

7 A. Yeah, that's when they --

8 Q. -- one, and something happened?

9 A. Well, that's when they completed, was November
10 17th --

11 Q. Okay.

12 A. -- 2001.

13 Q. Okay.

14 A. And the next significant event -- during that,
15 there was a period of time where the processing was going
16 on and we were kind of going back and forth to get it
17 processed properly.

18 They released -- they finally -- It was finally
19 completed July 23rd, 2002, is when the tapes were released.

20 And then July 30th, 2002, is when we loaded it up
21 to our workstation.

22 Q. And it would have been thereafter that you did
23 your analysis?

24 A. That's correct.

25 Q. When did you -- When did Devon propose this

1 prospect?

2 A. We -- Last fall, you know, we had started mapping
3 it up, and last fall we were aware of it. I mean, in-
4 house, we had shown it to our supervisors and so on. So, I
5 mean, as of, I would guess -- I would have to talk with
6 Steve to get the dates down exactly, but I think we
7 probably showed it in November -- October, November of last
8 year to our management.

9 Q. Okay. Now, I was a little confused by the
10 testimony about the gas-water contact versus the testimony
11 about sealing off the reservoir over the Woodford shale.
12 What is the significance of the gas-water contact in terms
13 of your opinion that these two areas are not in
14 communication?

15 A. Well, first of all it looks like we can map it to
16 a fault closure, which tells us that the structure is
17 closed off at that point. It gives us an idea of the size
18 of the structure and so on.

19 Secondly, we can map it -- There's a synclinal
20 separation between there, that point, and over into our
21 structure. So it's important in knowing where the gas-
22 water contact is. It may give us an idea of where the gas-
23 water contact might be on our structure, we don't know.

24 Q. But you testified that the gas-water contacts
25 vary, right?

1 A. They do vary across here, that's right.

2 Q. So if it's true that the structure is sealed off
3 at this middle fault line on your --

4 A. Right.

5 Q. -- map in A-2 --

6 A. Right.

7 Q. -- if that's true, then the location of the gas-
8 water contact over in the Bell Lake A/C 6 would not be a
9 very good indication of where it would likely be over in
10 the vicinity of the Rio Blanco; would that be an accurate
11 statement?

12 A. You know, if -- in mind if we can -- we can map
13 out -- I think we can map out that structure pretty
14 accurately, and we can show where the downdip contours are.

15 Q. Yeah.

16 A. So that I think when we come over to the Rio
17 Blanco structure, if we can see where it's closed off -- It
18 looks like it fills these structures to spill, is what it
19 looks like out here.

20 So I think that gives us an idea, then, of where
21 our gas-water contact might be.

22 Actually, the depth that -- the amount there
23 is -- most likely would be different over in the Rio
24 Blanco. I mean, that would be really surprising if it was
25 the same.

1 Q. Now, just looking at this A-2 without having any
2 expertise on the interpretation of it, it would look like
3 the fault line that you have identified that's the right --
4 the most to the right or to the east of the three --

5 A. Yes.

6 Q. -- that seems to have a -- there appears to be a
7 bigger anomaly in the --

8 A. Uh-huh.

9 Q. -- in the way you've drawn this here, there, than
10 there is over at the fault line in the middle.

11 A. Uh-huh, there is. There's more throw, probably,
12 on that fault.

13 Q. Do you think that the reservoir is sealed off
14 again at that point or --

15 A. Yeah, I think it is. I think that's another
16 place where it could seal -- I mean another separation
17 point between the two structures.

18 Q. Now, you cautioned that this is not necessarily a
19 vertical plot, correct?

20 A. It is a vertical plot. It is a vertical cut out
21 of the 3-D seismic data set. So it's accurate in its
22 representation of where everything is, I think.

23 Q. Okay. It would appear -- From the way you've
24 drawn in the purple on here, it would appear that the
25 Devonian is quite a bit higher --

1 A. Uh-huh.

2 Q. -- in the area to the right, in this right fault,
3 than it is anywhere else on the map.

4 A. That's correct.

5 Q. Is that --

6 A. That's the way I --

7 Q. -- that's the way it tends to show in your
8 interpretation?

9 A. Yes, sir, that is correct.

10 EXAMINER BROOKS: Okay, I believe -- really
11 believe that's all of my questions.

12 Mr. Catanach?

13 EXAMINER CATANACH: Just a couple.

14 EXAMINATION

15 BY EXAMINER CATANACH:

16 Q. Mr. Hager, does the trough in between these two
17 structures, does that have any component to separating the
18 two reservoirs?

19 A. It would if your gas-water contact came up a
20 little bit. If your gas-water contact comes up 50 feet or
21 so, suddenly the trough is a barrier to any kind of gas
22 movement, then.

23 Q. But basically at this point it's just the faults
24 that you -- and separation?

25 A. That's correct.

1 Q. I'm kind of curious in Section 4. You don't have
2 all of Section 4 mapped. Is there a reason for that?

3 A. We wanted to just show the important part of the
4 prospect out here, the part that we really wanted to
5 display.

6 Q. It appears from your display that that structure
7 that you're mapping in Section 4 may extend, in fact, into
8 the south half of that section?

9 A. Yeah, that's --

10 Q. That's your opinion?

11 A. That's my opinion.

12 Q. So in your opinion it would be productive from
13 that south half?

14 A. Yes, I believe so.

15 EXAMINER CATANACH: Okay, that's all I have.

16 EXAMINER BROOKS: Anything further?

17 MR. KELLAHIN: No, sir.

18 EXAMINER BROOKS: Okay --

19 MR. HALL: One brief follow-up, if I might --

20 EXAMINER BROOKS: Oh, okay, go ahead.

21 MR. HALL: -- before Mr. Hager leaves the stand.

22 FURTHER EXAMINATION

23 BY MR. HALL:

24 Q. Looking back in your Exhibit A-1, the third page
25 of that, it shows "Outline of Survey".

1 A. Right.

2 Q. And I assume that this displays the areal extent
3 of the survey you commissioned from WesternGeco; is that
4 correct?

5 A. That's pretty close to it. It changed a little
6 bit since the shot it, so it's changed a little bit, but
7 this is basically the area covered. Pretty close, to
8 within a mile or so.

9 Q. Okay. I'm curious to know, since we're only
10 talking about Section 4 here in the context of the pooling
11 Application, why Devon went out and commissioned a shot
12 over such a large area?

13 A. Well, we have other prospects in mind and we're
14 using 3-D to chase those down too.

15 So the Devonian wasn't the only thing that we're
16 looking for out here, and that was the justification behind
17 doing it.

18 Q. Okay. Now, based on your seismic and your
19 geophysical study, based on your conclusions from all that,
20 did Devon make the decision to acquire any additional
21 acreage interest in the Devonian in the surrounding
22 sections to Section 4?

23 A. Yes, I think so, I think we did.

24 Q. And where would that be?

25 A. I believe we were looking at some land a little

1 bit north of where we are, so Section --

2 Q. Is that Section 33?

3 A. That would be Section 33, yes.

4 Q. Did you pick up any interest in Section 5, do you
5 know?

6 A. I don't know, to tell you the truth.

7 Q. Okay. Thank you, Mr. Hager.

8 A. All right.

9 MR. KELLAHIN: Mr. Brooks, may we suggest we're
10 close to a lunch break?

11 If you would like to --

12 EXAMINER BROOKS: I was going to ask how long you
13 expect your next witness might be.

14 MR. KELLAHIN: Well, if the lunch break gives me
15 a chance, we might decide how to proceed from here.

16 EXAMINER BROOKS: Okay. Well, let us stand in
17 recess, then, till one o'clock.

18 (Thereupon, noon recess was taken at 11:48 a.m.)

19 (The following proceedings had at 1:00 p.m.)

20 EXAMINER BROOKS: You may proceed, Mr. Kellahin.

21 MR. KELLAHIN: Thank you.

22 We call at this time Mr. Bill Greenlees. Mr.
23 Greenlees spells his name G-r-e-e-n-l-e-e-s.

24 EXAMINER BROOKS: Very good. You may proceed
25 when ready, Mr. Kellahin.

1 MR. KELLAHIN: Thank you, Mr. Examiner.

2 BILL GREENLEES,

3 the witness herein, after having been first duly sworn upon
4 his oath, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. KELLAHIN:

7 Q. Mr. Greenlees, would you please state your name
8 and occupation?

9 A. My name is Bill Greenlees. I'm a petroleum
10 engineer.

11 Q. And where do you reside, sir?

12 A. I reside in Yukon, Oklahoma.

13 Q. What is your relationship with Devon?

14 A. I'm employed by Devon as an operations
15 engineering advisor.

16 Q. Summarize for us your education.

17 A. I have a bachelor of science in petroleum
18 engineering from Merida College in 1981. I have an MBA
19 from West Virginia University in 1991. I'm also a
20 registered professional engineer, registered in West
21 Virginia, Number 10115.

22 Q. Is the re-entry of the Rio Blanco 4 well in the
23 north half of Section 4 a project that is under your
24 responsibility?

25 A. Yes, sir, it is.

1 Q. Pursuant to that responsibility, have you
2 prepared for submittal to the Examiner an analysis of the
3 engineering details for the re-entry and how you propose to
4 whipstock and deepen this well to the Devonian?

5 A. Yes, sir, I have.

6 Q. In addition, have you reviewed the AFE proposal
7 sent to you by EGL Resources and compared that AFE to the
8 Devon AFE that's been exchanged?

9 A. That is correct.

10 Q. Have you been involved in the engineering,
11 geologic and seismic discussions concerning this prospect?

12 A. Yes, I have.

13 Q. Have you been in overall -- Do you have overall
14 knowledge of Devon's operations in this area in your plans
15 in the future?

16 A. Yes, I do.

17 MR. KELLAHIN: We tender Mr. Greenlees as an
18 expert petroleum engineer.

19 MR. HALL: No objection.

20 EXAMINER BROOKS: So qualified.

21 Q. (By Mr. Kellahin) When we look at Exhibit B-1,
22 Mr. Greenlees, the prospect is the north half of Section 4.
23 You're familiar with this well?

24 A. Yes, sir.

25 Q. Were you involved in filing the necessary permits

1 to obtain approval for this re-entry?

2 A. That is correct.

3 Q. And what's the status of the approval of your
4 permits?

5 A. We have an approved sundry from the BLM to --
6 actually two approved sundries, one to do the plugback
7 work, to plug the well back from the current completion
8 interval, which is the Atoka. We have a second sundry that
9 will allow us to whipstock the well, do a casing exit and
10 then drill down beside the original wellbore, down to the
11 Devonian formation.

12 Q. When you have a well like this where you're going
13 to take an existing wellbore that has an assigned well
14 number to it, it has an API number, right?

15 A. Yes, sir, it does.

16 Q. When you take a well under this circumstance as
17 the operator and file this sundry notice, describe for us
18 your understanding of how that process with the BLM links
19 in the District Office of the Division in Hobbs.

20 A. Okay. Because this is a federal lease, then we
21 submit our Applications to the BLM. We submit multiple
22 copies, or now the BLM has a website that's up and running.
23 So they can do that electronically.

24 Once they have reviewed that, then they will file
25 the copies, appropriate copies, with the OCD.

1 Q. What's your understanding of the process insofar
2 as obtaining the Division's final approval for the
3 whipstocking and production out of the Devonian?

4 A. To do this work, the BLM sundry is what is
5 required for me to do this work.

6 Q. Is it your belief that this is a wildcat well in
7 the Devonian?

8 A. Yes, sir, it is.

9 Q. From an engineering perspective, describe for us
10 why you think this existing wellbore is disconnected from
11 the North Bell Lake-Devonian to the west.

12 A. Okay. If I may stand up --

13 Q. Yes, sir.

14 A. -- referencing this, this is B- --

15 Q. -- -1.

16 A. -- -1, okay. Our proposed re-entry is here, in
17 the northwest quarter of Section 4. The well that Mr.
18 Hager has already talked about is just a 31-BCF Devonian,
19 Bell Lake Unit Number 6, in the North Bell Lake-Devonian
20 field. It's here.

21 Jim has already talked -- Mr. Hager has already
22 talked about the structure through here. I do want to
23 point out that he did mention briefly the DSTs that were
24 obtained in the original Bell Lake Number 6 well. And if
25 you recall, that is how I came up with the amount of column

1 in the original gas-water contact.

2 Amerada, subsequent to this well, drilled the
3 Bell Lake Unit Number 2 well in 1995, and that well also
4 was DST'd. And if you'll note the spatial relationship
5 between that well and our proposed re-entry, it's pretty
6 much right on line. This well tested wet throughout the
7 entire interval in the Devonian. It was drilled as an
8 Ellenburger well. It has recently been recompleted up to
9 the Morrow by Amerada. So the Devonian was not productive.

10 Q. At this point, Mr. Greenlees, does Devonian have
11 a rig available that they can engage in the re-entry of
12 this well and the whipstocking of it?

13 A. Devon has a rig. We have a similar project that
14 we're undertaking in the immediate vicinity. We have that
15 rig available to move to this well on completion of that,
16 yes, sir.

17 Q. When you look at the AFEs between your company
18 and EGL --

19 A. Yes.

20 Q. -- is it your conclusion that those AFEs are
21 reasonably competitive?

22 A. Yes, sir, I do believe that.

23 Q. And you've drawn attention in these later
24 exhibits to the specific points of difference?

25 A. That is correct.

1 Q. To your knowledge, has Devon drilled a well to
2 the Devonian, based upon 2-D seismic data?

3 A. Yes, they have.

4 Q. And with what results?

5 A. Again, I'll refer to Exhibit B-1. Subject well
6 is the Gaucho Unit Number 1, which is in Section 29 of 22-
7 34. This well was drilled in 1996. It was a Devonian
8 test. It was drilled off of a 2-D seismic play, and it was
9 a dry in the Devonian. It was subsequently completed in
10 the Morrow and made a successful Morrow well.

11 Q. With the knowledge that Devonian has
12 unsuccessfully attempted to produce the Devonian --

13 A. That Devon.

14 Q. -- based upon -- Devon, unsuccessfully produced
15 the Devonian on 2-D seismic data, what then did Devonian do
16 to engage in further acquisition of data?

17 A. Okay, Mr. Hager has already explained some of
18 that. Obviously, these wells are very expensive, and the
19 Devonian is a high-risk play. Map B-1 has 17 Devonian
20 penetrations on it. Of those, nine are productive. Those
21 -- If you do the math, that means there are eight Devonian
22 dry holes on that map, and they are expensive wells.

23 So after the results of the dry hole in the
24 Devonian in the Gaucho 1, that is when they stepped back
25 and elected to look more into the science of it.

1 Subsequently, in I believe 19- -- or in the year
2 2000, is when they began preparations to underwrite the
3 seismic shoot.

4 Q. Let me turn your attention to Exhibit C-1. Let's
5 go through these in the order I presented them to you, and
6 let's start with C-1.

7 And before we look at this, give us an
8 introduction about the status of the Rio Blanco 4 Federal 1
9 well.

10 A. Okay, the Rio Blanco 4 Federal Number 1 well was
11 drilled in late 1998 and completed in the Morrow formation
12 in early 1999. The well was productive in the Morrow. It
13 produced a little over 1.1 BCF from the Morrow.

14 On depletion of the Morrow reserves, the well was
15 recompleted in the Atoka. The Atoka had good pressure in
16 it, but as we see throughout -- in other completions, it
17 doesn't always yield a good completion. The Atoka was
18 produced sporadically, and the well is currently shut in
19 with the Atoka completion.

20 Q. What are your intentions for that wellbore?

21 A. Our intentions are to -- as I mentioned, I have
22 an approved sundry to plug back over the Atoka, and I do
23 show that in Exhibit C-2, setting plugs --

24 Q. When we start with C-1, we're looking at the
25 status of the well now. That's its current status?

1 A. That is correct, sir.

2 Q. So when we look at C-2, we're seeing your
3 proposed plan?

4 A. That is correct.

5 Q. Describe for us the plan.

6 A. The plan would be to remove the existing
7 production equipment, that is, the packer and the tubulars.
8 We would then come in and set a cast-iron bridge plug above
9 the Atoka perforations, cap that with 35 sacks of cement.
10 We would then come up in the 7-inch, and we would set a 7-
11 inch cast-iron bridge plug, and that is to prepare the
12 wellbore for the sidetracking operations.

13 Q. Turn to Exhibit C-3 and show us the schematic of
14 the proposed whipstock.

15 A. Okay. As mentioned, we would have a 7-inch cast-
16 iron bridge plug set at approximately 10,900 feet. From
17 there we would run and orient a whipstock which will allow
18 us to guide a mill to mill out the side of the casing. We
19 would mill out approximately a foot with the original mill,
20 pull out of the hole, come back in with a watermelon mill
21 to dress out that casing exit, drill approximately ten
22 feet, come out of the hole, pick up a 6-1/4-inch bit and
23 then begin the new hole section.

24 As I've shown on this schematic, we will plan on
25 drilling an S-shaped curve. We will kick the wellbore out

1 sufficiently away from the original wellbore so that we
2 don't drill into that original wellbore. Then we will drop
3 the wellbore back to vertical.

4 Q. Why would you not want to utilize the current
5 wellbore and simply deepen it, as opposed to the whipstock?

6 A. We did look at that option. If you'll notice on
7 the wellbore diagram, the very bottom string of casing
8 where the well was completed is 4-1/2 casing.

9 The original TD, which is depicted on the earlier
10 exhibits, was 13,380 feet. We have a projected TD of up to
11 15,000 feet to test the Devonian, so you're looking at
12 drilling over 1600 in very slimhole conditions. So that,
13 coupled with the fact that the shales between the base of
14 the current wellbore and the Devonian formation, we will
15 likely need higher mud weights to control just for hole
16 stability.

17 We do not want to drill into the Devonian while
18 overbalanced. The Devonian is essentially a freshwater
19 gradient, so to try to minimize formation damage, that did
20 not look like a viable option.

21 Q. Is there standard engineering drilling equipment
22 that is put in the hole so that you know where you are and
23 that you can guide the bottomhole to a specified target?

24 A. Yes, there is. We would begin with what is
25 called a gyro survey, and we would utilize that equipment

1 in order to set the whipstock. And we plan -- I have a
2 later schematic that will show the orientation. We do plan
3 to drill to a specific target. And that gyro will allow us
4 to accomplish that goal.

5 Q. Let's turn to Exhibit C-4 and have you identify
6 and describe that exhibit.

7 A. Okay, C-4 is a schematic showing the directional
8 plan. And if you'll recall from the earlier exhibit, we
9 were planning to set a whipstock and kick off at 10,900
10 feet. If you look at the information on the left portion
11 of that diagram, the very top writing is Kickoff point,
12 10,900 feet.

13 As I mentioned, we will cut the window in the
14 7-inch. We will then build at approximately two degrees
15 per hundred foot. We don't feel we need to get
16 significantly away from the original wellbore, so we're
17 only going to build our angle to about 8.35 degrees.

18 We will orient this along an azimuth of 315
19 degrees. The reason we are doing that is, the original
20 surface location of the well was at 1980 from the north,
21 1980 from the west, and to maintain standard spacing, we
22 want to get away from those hard lines.

23 Once we've built our angle, get sufficiently away
24 from the original wellbore, then we'll just simply use a
25 steerable drilling system, drop the angle back down to

1 zero. Once we're at zero we'll pull all the directional
2 equipment, the drilling motors, out of the well, and then
3 we'll go back to conventional rotary drilling.

4 Drill down to a depth -- into the Woodford shale,
5 which is approximately 14,350 feet. At that depth we will
6 set a string of 5-inch flush joint, 5-inch STL, and that is
7 so that, if you recall, I mentioned sometimes the shales in
8 the zones between the Morrow and the Woodford, you have to
9 have significant mud weight to control that. This string
10 of 5-inch will allow us to isolate the wellbore, and we
11 will drill out from that 5-inch casing with a 4-1/8-inch
12 bit. We will be able to drill that -- section drill into
13 the Devonian, essentially on fresh water, try to minimize
14 damage to the formation.

15 Q. Have you analyzed the costs associated with the
16 whipstocking?

17 A. Yes, sir, I have.

18 Q. And how do those costs you're proposing compare
19 if you had to drill a new well?

20 A. There are a number of cost savings. It's much
21 cheaper to try to utilize this wellbore as a whipstock.
22 The AFE that I will show next shows a dryhole cost for the
23 whipstock operations of less than a million dollars. A
24 comparable-designed new well would be over \$1.7 million
25 dryhole. So clearly an economic benefit to utilizing this

1 wellbore.

2 In addition, it's in a favorable location, as Mr.
3 Hager has already addressed.

4 Q. Let's turn to Exhibit C-5. Identify this exhibit
5 for us.

6 A. Exhibit C-5 is an AFE, authorization for
7 expenditure, that I prepared along with the assistance of
8 Bill Dougherty, our drilling engineer. This is the same
9 information that was submitted to Mr. Landreth and to EGL
10 for the well proposal.

11 Q. In your opinion, is the Devon AFE cost fair and
12 reasonable?

13 A. Yes, sir, it is.

14 Q. Would you propose that if the Examiner approve
15 Devon's pooling case, that he could rely on the AFE you're
16 presenting as one that is fair and reasonable and current?

17 A. Yes, sir.

18 Q. Let's skip it and go to the comparison. If
19 you'll go to Exhibit C-6, you've set up a table that makes
20 a comparison between the Devon proposal and the EGL
21 proposal?

22 A. That is correct.

23 Q. Walk us through that and show us the points of
24 difference and why those are there.

25 A. Okay. If you will look at the underlined section

1 at the very top, "Total Completed AFE cost", as I
2 mentioned, the AFE that we just looked at, Devon's cost is
3 \$1.334 million.

4 Now, after we had provided EGL with our cost
5 estimate we did receive a cost estimate from them. Their
6 number was \$1,015,905. And so \$300,000, roughly,
7 difference.

8 What I've done here -- Because both companies use
9 different accounting codes and different nomenclature, you
10 can't do a line-by-line comparison. What I've done on this
11 exhibit, Number C-6, is group what I feel are the like
12 elements so that we can do a quick comparison.

13 Q. So I understand the spreadsheet, you've got the
14 Devon proposal first, then EGL and then something called
15 Delta. I assume that's the difference.

16 A. Delta is the difference between Devon's cost and
17 EGL's cost, yes.

18 Q. And so as you read down the Delta columns, then,
19 it's color-coded and you can see if one company's proposing
20 more or less for that particular activity?

21 A. That is correct.

22 Q. Let's do that.

23 A. Okay. One of the big items in any drilling
24 project, of course, is the drilling rig costs and
25 associated costs. And so because we again used different

1 terminology and different accounting, I just wanted to
2 point out that if you add up all the associated costs
3 between the two AFEs associated with drilling, then
4 essentially we're talking about the same number. It's
5 within \$4000.

6 The next item is Directional Services. We went
7 over some exhibits, and I went over just briefly the
8 technology that we'll utilize to ensure that we stay away
9 from the original wellbore and stay off the hard lines to
10 the east and the south of the original wellbore.

11 Those directional services are based on eight
12 days of work, so the tools will be in the hole eight days,
13 \$6000 a day, plus the gyro cost. So that's an additional
14 \$54,500 that I don't see reflected on EGL's AFE.

15 Another significant difference between the two is
16 at the very bottom, the yellow highlighted section, Rental
17 tools and equipment. Because we'll be working in a smaller
18 hole size, significant cost for rental drill pipe, and that
19 essentially equals the number that is on EGL's proposal.
20 In addition to that, we do have other downhole equipment.
21 We have surface rental equipment. So I feel that the
22 numbers that we presented on our AFE are adequate.

23 Q. Okay.

24 A. Not excessive.

25 Q. If you'll turn the page?

1 A. There's only one number there highlighted in
2 yellow. If you'll turn your attention to that, all I
3 wanted to point out there was that on any drilling project
4 that we're involved with -- and apparently EGL has the same
5 philosophy -- we do include some contingency funds. There
6 is some risk associated with this work. In Devon's case we
7 use 15-percent contingency, EGL used 10-percent
8 contingency. So that accounts for a little bit of a
9 difference between the two numbers.

10 Finally, if you turn to page 3 of that exhibit,
11 one major item is in the stimulation. EGL's AFE provides
12 for an acid treatment and their number is \$15,000. Now, if
13 you notice on our AFE, Devon's AFE, we've included \$115,000
14 for that. Now again, that's a contingency. This is a
15 wildcat well, we don't know what kind of reservoir rock we
16 will see. It is most likely we would do an acid
17 stimulation similar to what EGL has proposed, as a first
18 step. We don't know about the drilling induced damage, nor
19 do we know about the quality of the reservoir rock that
20 we'll encounter, so we included some additional funds if
21 necessary. So that's a pretty big portion of the
22 difference between our two costs.

23 The next item, \$27,000, the highlighted number, I
24 did not see where they had included funds for the
25 whipstocking, for the whipstock equipment itself, and

1 that's a pretty expensive piece of equipment.

2 And then finally the last number in yellow,
3 flowback testing, flowback equipment and testing, we're
4 going into this thinking we're going to need flowback
5 equipment, so we have included funding for that.

6 MR. KELLAHIN: That concludes my examination of
7 Mr. Greenlees. We move the introduction of his Exhibits
8 C-1 through C-6.

9 EXAMINER BROOKS: Objection?

10 MR. HALL: No objection.

11 EXAMINER BROOKS: C-1 through C-6 are admitted.

12 Mr. Hall?

13 CROSS-EXAMINATION

14 BY MR. HALL:

15 Q. Mr. Greenlees, in connection with your work for
16 Devon on this prospect, did you do a reservoir evaluation
17 at all?

18 A. No, sir.

19 Q. Does Devon plan on presenting another reservoir
20 engineer to testify today?

21 A. I can't answer that.

22 Q. Who can answer that?

23 MR. KELLAHIN: I'll tell you, I have one but I'm
24 not sure I'll call him.

25 MR. HALL: What's his name in the event we want

1 to call him?

2 MR. KELLAHIN: Jim Linville.

3 Q. (By Mr. Hall) Mr. Greenlees, you did testify
4 that you had -- or at least Devon had commissioned some 3-D
5 seismic over the old 2-D seismic in Section 29 for that
6 well up there, did you not?

7 A. I did not say that specifically, no.

8 Q. Did that 3-D study run over the location of that
9 well in Section 29?

10 A. I cannot answer that.

11 MR. HALL: I have nothing further, Mr. Examiner.

12 EXAMINER BROOKS: Mr. Catanach, I think I'll
13 defer to you on this witness.

14 EXAMINATION

15 BY EXAMINER CATANACH:

16 Q. I just want to know what the displacement is
17 going to be of the deviated wellbore from the original
18 wellbore?

19 A. Seventy-one feet.

20 Q. Seventy-one feet.

21 A. Yeah, we drew it up on a 50-foot north and 50-
22 foot west, just to get away from those hard lines.

23 Q. So are you going to be able to pretty much target
24 that location pretty accurately?

25 A. Yeah, the original wellbore, the deviation on the

1 bottom, actually the entire hole, was very minimal, so not
2 a lot of deviation problems there. We will have a
3 steerable system with an MWD system while we're in the
4 deviated -- while we're building the angle and then
5 dropping the angle, so...

6 Q. Okay. So do you at this point have a footage
7 location for that bottomhole location or not? I mean from
8 the section lines and such?

9 A. Yes.

10 Q. Do you have that somewhere in your --

11 A. It would be 1930 from the north, 1930 from the
12 west.

13 EXAMINER CATANACH: Okay. I think that's all I
14 have.

15 EXAMINATION

16 BY EXAMINER BROOKS:

17 Q. Just out of curiosity, what kind of stimulation
18 did you contemplate in this extra \$100,000 that you put in
19 your --

20 A. It would depend on what we saw, sir. It could be
21 anywhere from a gelled acid frac to a conventional frac.

22 Q. So that was just a contingency --

23 A. Absolutely.

24 Q. -- not a plan, *per se*?

25 A. Absolutely.

1 EXAMINER BROOKS: Okay, anybody have follow-up?

2 MR. KELLAHIN: No, sir.

3 EXAMINER BROOKS: Witness may stand down.

4 THE WITNESS: Thank you.

5 MR. KELLAHIN: Mr. Examiner, we call Mr. Richard
6 Winchester.

7 EXAMINER BROOKS: You may proceed.

8 MR. KELLAHIN: Thank you.

9 RICHARD C. WINCHESTER,

10 the witness herein, after having been first duly sworn upon
11 his oath, was examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. KELLAHIN:

14 Q. Mr. Winchester, for the record, sir, would you
15 please state your name and occupation?

16 A. My name is Richard Winchester, I'm a petroleum
17 landman with Devon Energy.

18 Q. Summarize for us your educational and employment
19 experience?

20 A. I graduated in 1990 with a bachelor of business
21 administration degree from the University of Oklahoma.
22 I've been employed in the oil and gas industry for
23 approximately 13 years, primarily with Conoco, and the last
24 three and a half years with Devon Energy.

25 Q. You reside where, sir?

1 A. In Norman, Oklahoma.

2 Q. As part of your duties do you prepare, review and
3 process on a regular basis the various kinds of contracts
4 and agreements that are traded among landmen, in order to
5 consolidate interests for a spacing unit for a well?

6 A. Yes, sir, I do.

7 Q. Are you familiar with how to resolve questions
8 about who owns what tracts and where?

9 A. Yes, sir, I do.

10 Q. Do you rely upon title opinion, the work product
11 by title examiners and attorneys, to assist you in
12 determining who should be entitled to share in production?

13 A. Yes, sir, I do.

14 Q. In this case and in other cases, have you been
15 the lead landman for Devonian to attempt to consolidate the
16 interest for a particular prospect and reduce it to a
17 voluntary agreement?

18 A. Yes, sir, I have.

19 Q. When Mr. Landreth and EGL are dealing with the
20 well, the re-entry in Section 4, and dealing with Devon,
21 they're dealing with you?

22 A. Yes, sir, they are.

23 Q. As part of your preparation for this hearing have
24 you reviewed your files and correspondence between you, EGL
25 and Mr. Landreth?

1 A. Yes, sir, I have.

2 Q. To the best of your knowledge, does this exhibit
3 book, which we will mark as -- The book we'll call Exhibit
4 A, and then all of these are going to be A-1 through --
5 -32, I think is the last one.

6 It may relieve Mr. Brooks's anxiety, we're not
7 going to look at every one of these.

8 A. I certainly hope not.

9 Q. What we'll attempt to do, Mr. Winchester, is see
10 if we can't summarize this in a way that makes it
11 meaningful so at least right now the Examiner doesn't have
12 to read all those.

13 A. That's correct.

14 Q. And should he choose to read it, it's here to
15 read?

16 A. Yes, sir.

17 EXAMINER BROOKS: Well, excuse me a minute. I
18 believe Mr. Hager's Exhibits are designated A-1, A-2, et
19 cetera.

20 MR. KELLAHIN: You are quite right, Mr. Examiner.
21 Why don't we call this the D book?

22 EXAMINER BROOKS: Okay, that's fine with me.

23 MR. KELLAHIN: That will keep it straight. Okay,
24 you're the D book.

25 Q. (By Mr. Kellahin) There's a certain complexity

1 to the proposals between Mr. Landreth, EGL and Devon, are
2 there not?

3 A. Yes, sir, there are.

4 Q. Are you satisfied that the level of detail and
5 expertise required to study this are within the scope of
6 your qualifications?

7 A. Yes, sir, they are.

8 Q. They didn't give you anything that you never
9 heard of or tried to deal with before?

10 A. No, sir.

11 Q. Okay. How long have you been a practicing
12 landman?

13 A. For 13 years.

14 Q. Have you on any prior occasions had to deal with
15 Mr. Landreth?

16 A. Yes, sir, I have.

17 Q. On any prior occasions have you dealt with Mr.
18 Wes Perry of EGL Resources?

19 A. No, sir.

20 Q. When we look at this exhibit book, behind Exhibit
21 Tab Number 1, I have something marked Devon Exhibit 1. Do
22 you see that?

23 A. Yes, I do.

24 Q. It's a summary that's numbered paragraph 1, and
25 it goes all the way through 41 and then it has a summary at

1 the end?

2 A. Yes, that's correct.

3 Q. Is this a document that you have prepared and
4 edited?

5 A. Yes, sir.

6 Q. We're about to look at your work product. In
7 looking at Exhibit 1, have you talked about the various
8 items that are contained within the exhibit book?

9 A. Yes, sir, I have.

10 Q. And you're familiar with all these individual
11 items?

12 A. Yes, sir.

13 Q. Let's start at the beginning.

14 A. Okay.

15 Q. When you were asked to do something about taking
16 the existing Rio Blanco 4 Federal Com Well Number 1 in the
17 north half of 4 and proceed with making proposals, did you
18 make an effort to determine the ownership in Section 4?

19 A. Yes, sir, we did.

20 Q. Did you make any effort to determine from the
21 regulators whether this was to be a wildcat well or
22 something else?

23 A. Yes, sir, I did.

24 Q. When we look at Devon's proposal, was the Devon
25 proposal based upon exploratory work that Devon had already

1 commenced?

2 A. Yes, it was.

3 Q. Let's start back there. When -- How, to your
4 understanding, did this get started?

5 A. If you'll notice behind Tab 2, there is a well
6 proposal from EGL Resources dated March 15th, 2002, and
7 they are proposing to re-enter and deepen the Rio Blanco 4
8 Federal Number 1 well. The proposed TD is to the Devonian
9 formation.

10 At that point, as Mr. Hager has testified, Devon
11 had made a commitment, a significant investment in the 3-D
12 data, and at this point we were not prepared to go forward,
13 and we felt like it was prudent to wait till we got the
14 data back and had a chance to review the data before
15 proceeding with this project. There was no additional
16 follow-up from EGL after we had told them that it was our
17 recommendation that we hold off until we had a chance to
18 review the seismic data.

19 Q. When we go back to page 1 of Exhibit 1 and you
20 drop down to paragraph 4, what are you conveying to us in
21 paragraph 4? The first proposal made by Devon is when?

22 A. Well, the first -- Paragraph 4 relates to Devon
23 acquiring manager approval to go forward with the 3-D
24 survey.

25 Q. So if the Examiner is looking for a time

1 chronology and the sequence of various activities, this is
2 what your file reflects for the dates of these things?

3 A. That's correct.

4 Q. Okay. And then paragraph 5, you're talking at
5 this point about Devon has received EGL's proposal, which
6 is behind Exhibit Tab Number 2?

7 A. That's correct.

8 Q. Pick up the discussion from there. What happens
9 next?

10 A. Well, at that point, of course, it was a
11 significant period of time before we got the data in house
12 and had a chance to take a look at it, review that.

13 Q. The next thing that happens is, Mr. Landreth is
14 making a proposal?

15 A. That's correct, on September 20th Mr. Landreth --
16 and this is behind Tab 3 -- Mr. Landreth sent a letter to
17 Devon Energy. Within it he discusses his desire to move
18 forward with the project. And if you'll notice down in the
19 third paragraph, some of the highlights is that of course
20 they would like to have the opportunity to take a look at
21 the 3-D seismic data, and that he is willing to discuss
22 farming out up to two-thirds of his 62-1/2-percent interest
23 on terms to be negotiated after that review.

24 Q. In support of Mr. Landreth's proposal to Devon,
25 did Mr. Landreth submit to Devon any seismic data or

1 geologic analysis of his proposal?

2 A. No, sir.

3 Q. At this point, Mr. Landreth's proposal is linked
4 to looking at your 3-D seismic study?

5 A. Yes, sir, it is.

6 Q. What then happens?

7 A. If you'll look behind Tab 4, on November 4th we
8 prepared an offer to Mr. Landreth. We were prepared to
9 commence operations on the re-entry within 90 days after
10 receipt of a BLM drilling permit. We offered him -- We
11 made an offer to acquire two-thirds of his 62.5-percent
12 interest, we would give him access to the 3-D data and we
13 would pay him a bonus per acre for an assignment for those
14 interests.

15 Q. At this point in the negotiations, who is
16 intended to be the operator?

17 A. Devon energy.

18 Q. So the November 4th letter is your proposal to
19 Mr. Landreth that includes these various terms and
20 conditions?

21 A. That's correct.

22 Q. In this letter on November 4th, in the first
23 numbered paragraph, you're talking about "The Section 4
24 working interest owners will form a 640-acre working
25 interest unit..."

1 A. That's correct.

2 Q. What did you intend to mean by that?

3 A. Just that the parties with working interest in
4 Section 4 would combine their interest to test the Devonian
5 prospect within Section 4 itself.

6 Q. At that point did Devon have any interest in the
7 south half of 4?

8 A. Yes, we did.

9 Q. In the south half of 4?

10 A. That's correct -- No, we had no leasehold
11 interest in the south half of 4.

12 Q. That's what I'm saying.

13 A. Yeah, I'm sorry.

14 Q. It's my mistake.

15 A. I misunderstood.

16 Q. The south half of 4, you did not have an
17 interest?

18 A. That's correct, and it was our intent to offer
19 something to earn an interest in the south half of 4.

20 Q. And this exchange for a part of Mr. Landreth's
21 interest would then give you an interest in the south?

22 A. That's correct.

23 Q. And there's percentages discussed?

24 A. That's correct.

25 Q. And you would operate, and then you would form a

1 working interest owner unit of the whole section?

2 A. That's correct.

3 Q. Mr. Winchester, do you equate a working interest
4 owner unit with the spacing unit size assigned to a well by
5 the Division?

6 A. No, sir, I do not.

7 Q. How are they different?

8 A. The working interest unit, as I explained, is
9 formed by the various parties who have interests within
10 whatever the proposed unit is. The proration unit is
11 determined by the NMOCD.

12 Q. Has it always been Devon's position to dedicate
13 the north half of Section 4 as a wildcat spacing unit --

14 A. Yes, sir.

15 Q. -- for the Devonian production?

16 A. Yes, sir.

17 Q. That's always been your position?

18 A. Yes, it has been.

19 Q. When we get to the end of this, that still is one
20 of the differences between you and Mr. Landreth --

21 A. Yes, sir.

22 Q. -- is what acreage gets dedicated as the spacing
23 unit?

24 A. That's correct.

25 Q. After the November 4th letter, what then

1 transpires, Mr. Winchester?

2 A. Well, we did not get a response from Mr. Landreth
3 on the November 4th letter, and so I called to follow up.
4 And he had at that time said that this was not the type of
5 proposal that he was looking for.

6 So on November 3rd we made another proposal, and
7 again to form a 640-acre working interest unit. We're
8 saying that we'll commence operations within 90 days of
9 receipt of the BLM permit.

10 Q. Have you at this point improved your proposal to
11 Mr. Landreth's position?

12 A. Yes, we have.

13 Q. So you're offering him more --

14 A. I'm sorry --

15 EXAMINER BROOKS: For the record, that was
16 December 3rd. I think you --

17 THE WITNESS: I'm sorry, December 3rd, yes, sir.

18 EXAMINER BROOKS: Okay, go ahead.

19 THE WITNESS: If you look down under item number
20 3, of course we're offering the right to acquire an
21 assignment of two-thirds of his 62.5-percent working
22 interest, and under item b. we're saying that we'll pay a
23 hundred percent of his cost, basically dryhole cost, to re-
24 enter and deepen the well to casing point.

25 Q. (By Mr. Kellahin) Okay, so that's the additional

1 increment that you're conceding or giving to Landreth at
2 this point?

3 A. Yes, sir.

4 Q. Well what then happens, Mr. Winchester?

5 A. On December 4th Mr. Landreth responded saying
6 that -- you know, obviously he wants to move forward with
7 the project, but because we don't give a firm commencement
8 date, and that our offer is subject to management approval,
9 he cannot give it serious consideration.

10 Q. When you talked about those limitations, are you
11 treating Mr. Landreth differently on those points than you
12 would treat anyone else that you're negotiating with?

13 A. No, sir.

14 Q. Your deals, then, are made subject to final
15 approval?

16 A. That's correct.

17 Q. Tab 7, what are we looking at here?

18 A. Tab 7 is a letter from Mr. Landreth to Devon, and
19 in this letter he is -- Obviously there were conversations
20 that were not conducted through written correspondence, but
21 he has come back to us and has said, well, I would like to
22 see the project proceed as follows. And then he gives a
23 list of things he would like to see happen and that he
24 would like to see an offer from Devon before he makes a
25 decision.

1 Q. Okay. Then what happens?

2 A. Then on December 17th we prepared an offer to Mr.
3 Landreth and to EGL Resources to proceed forward, and again
4 forming a 640-acre working interest unit, and that we would
5 have the right to earn an assignment up to two-thirds of
6 his 62.5-percent interest. And under this proposal we are
7 offering to carry his cost and EGL's cost to the tanks for
8 whatever portion -- or two-thirds of what they're willing
9 to farm out, and we've limited the carry on that to 110
10 percent.

11 Q. And if he accepts this proposal, then you
12 intended to show him the 3-D seismic data that covered this
13 prospect?

14 A. Yes, sir.

15 Q. What happened then? This is out of sequence
16 now --

17 A. Yes, sir.

18 Q. -- Tab 8, it says December 15th [sic] but that's
19 a typo. That should be January 17th.

20 A. That's correct.

21 Q. So skip that letter for a moment, and let's go to
22 December 20th, which is Tab 10.

23 A. That's correct. On December 20th, Mr. Landreth
24 sent a letter back to us saying that he was willing to
25 accept the farmout terms, provided that we can work out

1 some details, and he has a spud date of April 1st, and that
2 he also wanted to take a look at our seismic data over his
3 Bootleg Ridge East prospect. So he wanted to tie that in
4 as well.

5 Q. Take us from here and summarize for us, if you
6 can, in a collective way --

7 A. Okay.

8 Q. -- where we are in terms of the negotiations by
9 the end of February.

10 A. Okay. You know, several letters during that time
11 were traded, and there were issues raised that we were not
12 able to come to an agreement on. But at that point Mr.
13 Landreth and EGL had recommended that we provide to them
14 our proposed form of participation and operating agreements
15 and take a look at that and see if we could work out the
16 details in there.

17 So we forwarded our proposed participation and
18 operating agreement to Mr. Landreth and EGL. And if you'll
19 look back on -- moving forward to February 14th, Mr.
20 Landreth responds to our proposed participation and farmout
21 agreement.

22 Q. Okay, let's go to Tab -- 19, I think.

23 A. Yes, sir, it's behind Tab Number 19.

24 Q. Before we get to Tab 19, there are two letters of
25 February 7th, each of them stamped "Draft".

1 A. Yes, sir.

2 Q. Is this an internal draft in the company, or is
3 it for some other reason?

4 A. It's just a draft -- It's a draft of the
5 proposal. It's sent out for their review.

6 Q. So this is what Mr. Landreth and Mr. Wes Perry
7 received?

8 A. Yes, sir.

9 Q. And in response to that, then we go to 19 and see
10 what they were asking you to change?

11 A. That's right. Mr. Landreth responds again --
12 It's hard to see the date, but it was faxed to us on
13 February the 19th, and where he's gone through the
14 provisions in the agreement and red-lined or underlined
15 proposed changes.

16 Q. Go down in paragraph 4 for me where it says "Test
17 Well".

18 A. Yes, sir.

19 Q. Read five lines down where it says "Parties
20 agree".

21 A. It says "The Parties agree that the spacing unit
22 established for said Test Well will be the north half of
23 Section 4, Township 23 South, Range 34 East."

24 Q. Was that in the draft proposal that you had faxed
25 to Mr. Landreth?

1 A. Yes, sir.

2 Q. Is it one of the sentences that he changed or
3 proposed to be changed with the underlining?

4 A. It appears that it was accepted.

5 Q. During the course of this transaction or this
6 negotiation process, did Mr. Landreth propose that it be
7 expanded to include any lands other than Section 4?

8 A. Yes, sir, he proposed that it extend up into
9 Section 33 of 22 South, 34 East.

10 Q. What happened as a result of the changes Mr.
11 Landreth had proposed back to you under Exhibit 19?

12 A. If you'll look at Exhibit 21, we responded to Mr.
13 Landreth's proposed changes where we were agreeing to carry
14 the third working interest. He had requested that instead
15 of there being a 110-percent limit for the carry, that it
16 would be expanded to 125 percent of the cost in the
17 original AFE.

18 There were also -- on the second page he placed a
19 restriction on Devon's ability to drill a well off the
20 south line in Section 33, which is not acceptable to Devon.

21 Q. So at this point there's a change in positions by
22 the companies, and he now wants an offset limitation for
23 any well in Section 33?

24 A. That's correct.

25 Q. Did you advise him that that was not acceptable?

1 A. Yes, I did. And in fact, in this letter I
2 basically said -- I mean, we feel like -- you know, as far
3 as we're concerned, we certainly made a reasonable effort,
4 and if he would like to accept these items we will
5 incorporate the language in an agreement. Otherwise, let's
6 just move forward to test the well on a north-half
7 proration unit.

8 Q. When we look behind Exhibit Tab 23, what are you
9 now communicating to Mr. Landreth, Wes Perry and to
10 Southwestern Energy?

11 A. We had made a proposal to re-enter -- it's a
12 formal proposal to re-enter the well, and it's based upon
13 Devon operating and the proration unit being the north half
14 of Section 4. We requested that they respond no later than
15 March 13th, or we would commence compulsory pooling
16 procedures.

17 Q. After this, did Mr. Landreth request from you
18 that you send in copies of your electronically approved
19 permits from the BLM?

20 A. Yes, sir, he did.

21 Q. And did you do that for him?

22 A. Those were faxed to him, yes, sir.

23 Q. And where do we find those?

24 A. Those will be under Tab 25.

25 Q. When we look behind Exhibit Tab 26, there's a

1 sundry notice that's named under EGL Resources.

2 A. Yes, sir.

3 Q. What has happened to EGL Resources' sundry
4 notice, which appears to be stamped and approved on
5 February 27th?

6 A. That sundry notice was rescinded by the BLM
7 because EGL was not the operator of the well.

8 Q. So as you turn behind the forms and you come to
9 the BLM letters saying that their approval --

10 A. -- is rescinded, yes, sir.

11 Q. On March 13 did you direct that the -- On March
12 5th did you direct that an application for pooling be
13 filed?

14 A. Yes, sir, I did.

15 Q. And that's what we find behind Exhibit Tab 27?

16 A. Yes, sir.

17 Q. Subsequent to that, there is a filing by Mr. Carr
18 on behalf of EGL under Tab 28 which shows that on March
19 19th he filed a competing pooling case, right?

20 A. That's correct.

21 Q. And even after all that's done, did you continue
22 to try to meet with Mr. West Perry and Mr. Landreth to try
23 to resolve this?

24 A. Yes. In fact, after we had filed for our
25 Application on March 7th, Wes Perry with EGL Resources and

1 I visited and talked about our competing proposals, and I
2 offered to come to Midland to meet with them and see if
3 there was some way that we could resolve those issues. So
4 tentatively we agreed to meet on March 13th in EGL's office
5 in Midland.

6 Q. And did you do that?

7 A. Yes, sir, we did.

8 Q. What happened?

9 A. Well, on March 12th, arriving in Midland, I
10 called to confirm our meeting. I then called Mr. Landreth
11 and invited him to the meeting, and during our conversation
12 he asked if our -- Devon's proposal would be based upon us
13 being operator, and I said yes, and if it would be based
14 upon 320-acre spacing, and I said yes. And at that point
15 he didn't feel like it would be beneficial to meet.

16 Q. Do you have an estimate, Mr. Winchester, of how
17 many various correspondence and times and meetings and
18 phone calls that you exchanged with these parties over the
19 last several months?

20 A. I mean, there have been a number of telephone
21 conversations, at least 18 letters sent back and forth to
22 each party.

23 Q. At this point do you believe you've exhausted all
24 reasonable efforts --

25 A. Yes, sir.

1 Q. -- to reach an agreement?

2 A. Yes, sir, I do.

3 Q. It simply can't be done, in your opinion?

4 A. That's correct.

5 Q. Do you have a recommendation to the Examiner
6 under your typical joint operating agreements as to what
7 you would recommend for overhead rates?

8 A. Well, what I would recommend -- and this is what
9 we had tentatively agreed to with EGL and Mr. Landreth, and
10 that would be \$5000 for drilling rates and \$500 per month
11 for operating.

12 Q. So the proposed drilling and producing overhead
13 rates were not a difference of opinion between the parties?

14 A. No, sir.

15 Q. Was your AFE a point of contention with either
16 EGL or Mr. Landreth?

17 A. No, sir.

18 Q. Were you anxious to get this done?

19 A. Yes.

20 Q. Do you have a rig available to do this work?

21 A. Yes, sir. Of course Mr. Greenlees could answer
22 this more thoroughly, but yes, we do.

23 Q. That's your understanding --

24 A. That's my understanding.

25 Q. You guys are ready to go?

1 A. That's correct.

2 MR. KELLAHIN: That concludes my examination of
3 Mr. Winchester.

4 We move the introductions of his Exhibit Book D,
5 which are Exhibits 1 through 32.

6 EXAMINER BROOKS: Any objection?

7 MR. HALL: Just one question. Was the Exhibit
8 under Tab 1 prepared by you?

9 THE WITNESS: Under Tab 1. Yes, sir.

10 MR. HALL: No objection, Mr. Examiner.

11 EXAMINER BROOKS: Exhibits D-1 through D-32 will
12 be admitted.

13 I note that the tabs go D-1 through D-31 -- or go
14 1 through 31, and then there is another tab that's labeled
15 29 that's a duplicate. Is that 32?

16 MR. KELLAHIN: Yes, sir. Office Depot only goes
17 to 31, that's -- in the bin yesterday.

18 EXAMINER BROOKS: Okay, well, we have to deal
19 with what Office Depot has in the bin.

20 Okay, Mr. Hall?

21 MR. HALL: Yes, sir, thank you.

22 CROSS-EXAMINATION

23 BY MR. HALL:

24 Q. Mr. Winchester, I understand from your testimony
25 that your job responsibilities also touch on regulatory

1 compliance, including the Rules of the Oil Conservation
2 Division here in New Mexico; is that right?

3 A. As far as spacing, yes, sir.

4 Q. All right. Due to the circumstances in this case
5 I have to ask you -- and I think you can answer this
6 question on a yes-or-no basis -- is the boundary of the
7 spacing and proration unit for the Rio Blanco well one mile
8 from the North Bell Lake-Devonian Gas Pool?

9 A. Yes, sir, it is.

10 Q. Mr. Winchester, in your view, from your
11 experience in this particular matter, there's really no
12 difference, no substantial difference, on the geology
13 between Landreth and EGL and Devon, is there really?

14 A. Yes, sir, I believe there is.

15 Q. Devon and EGL and Landreth are all in agreement
16 on the well location; is that right?

17 A. That's correct.

18 Q. And all parties agree on the propriety and the
19 likelihood of a commercial success in the Devonian for this
20 particular acreage; is that right?

21 A. That's correct.

22 Q. How does 640-acre spacing hurt Devon?

23 A. Well, under the scenario that's -- Well, in
24 Section 4, if we spaced it on 640 Devon's interest would be
25 reduced from 12.5 percent to 6.25 percent.

1 Q. Any other harm?

2 A. Yes, from what Mr. Hager has shown us, there's a
3 -- the two structures are not connected, so it should be
4 spaced as a wildcat well. And in that case it would be
5 based on 320-acre spacing.

6 Q. All right, I'm speaking just with respect to
7 Section 4 for the time being. There's no other harm, other
8 than, if I understand, your interest would be diminished
9 somewhat?

10 A. That's correct.

11 Q. So you have a 25-percent interest on a 320?

12 A. We would have a 12.5-percent interest on a 320 --

13 Q. I'm sorry.

14 A. -- and a 6.25-percent interest on the 640.

15 Q. And the obverse would be true for Mr. Landreth's
16 interest, would it not? If we go from a 640 to a 320, then
17 the Landreth and the EGL interests are proportionately
18 reduced, correct?

19 A. That's correct.

20 Q. And the proposal before the Examiner is that
21 Devon be the operator of this well, speaking for 12.5
22 percent, correct?

23 A. Actually, it would be 25 percent.

24 Q. All right, and your ownership would be only --

25 A. -- 12.5 percent.

1 Q. All right. And the other parties, outside of the
2 interest that Devon speaks for, would bear how much of the
3 cost of the well?

4 A. They would bear the other 87.5 percent.

5 Q. Outside of the changes to proportionate
6 ownership, what's the advantage to Devon to developing this
7 area on 320s?

8 A. You would probably need to talk to our technical
9 folks about the development aspect.

10 Q. All right. In connection with your overall
11 review of this prospect, Devon has had their reservoir
12 engineers undertake a reservoir analysis, drainage analyses
13 and the like?

14 A. As far as I know, yes, sir.

15 Q. They've taken a look to see what the ultimate
16 recoverabilities would be on 640-acre spacing versus 320-
17 acre spacing?

18 A. I believe they have.

19 Q. Do you know what the results of those studies
20 are?

21 A. I cannot speak to that.

22 Q. Do you know whether development on 320-acre
23 spacing would result in the recovery of any additional gas
24 reserves?

25 A. I'm not a reservoir engineer, you'll have to

1 ask --

2 Q. Okay, I understand.

3 During the course of your negotiations with Mr.
4 Landreth and Mr. Perry at EGL, tell us about the
5 discussions the parties had with respect to the development
6 of Section 33.

7 A. Well, Section 33 was --

8 MR. KELLAHIN: I'm going to object to the
9 question. It's beyond the scope of what we're doing here.

10 MR. HALL: No, sir, Mr. Examiner. In one of
11 Devon's own exhibits, if you'll look under Tab 10, it's a
12 letter from Mr. Landreth dated December 20th, and that
13 subject is specifically raised. That exhibit says,
14 "Another subject which probably needs to be discussed is
15 how farm-ins of adjoining tracts will be negotiated and
16 shared..."

17 They brought it up, we're entitled to pursue it.

18 EXAMINER BROOKS: I'm not sure how relevant it
19 is, but I'll overrule the objection. Go ahead.

20 Q. (By Mr. Hall) Tell us about the discussions you
21 had with Mr. Landreth and Mr. Perry about developing
22 Section 33.

23 A. We had initially talked about forming an AMI, and
24 Devon's proposal was to limit the AMI to lands east and
25 west of Section 4, and the north half, I believe, of

1 Section 9 to the south. It did not include Section 33.

2 Q. And why not?

3 A. Because we had purchased 100 percent of that
4 interest.

5 Q. I see, and when did you do that?

6 A. Section -- There was a 320-acre tract in Section
7 33 that was acquired sometime back in a BLM sale, and then
8 our -- the term assignment was purchased from OXY Permian,
9 or actually there were lands traded with OXY Permian that
10 included that term assignment that happened in December of
11 last year.

12 Q. All right, so this was after Devon had acquired
13 its seismic in the area?

14 A. That's correct.

15 Q. Then you went out and acquired the Section 33
16 land?

17 A. That's correct.

18 Q. Did you ever offer any interest in the Section 33
19 acreage to Mr. Landreth or to EGL?

20 A. No, sir.

21 Q. Why not?

22 A. Because we acquired that acreage by virtue of the
23 information we had acquired through the 3-D seismic data,
24 and having made that initial investment, or that
25 significant investment, we certainly wanted to use that

1 information to Devon's benefit.

2 Q. And this is after Mr. Landreth had put that issue
3 on the table on December 20th?

4 A. That's correct. That's when the deal was flanged
5 up, following that. There had been conversations with OXY
6 prior to that.

7 Q. Did you ever represent to either EGL or Mr.
8 Landreth or any of their representatives that Devon was
9 planning a well in Section 33 to offset Section 4?

10 A. Did I represent that? In a meeting with EGL I
11 did.

12 Q. Yes, and what location was indicated for that
13 well?

14 A. Well at the time we said, of course, under the
15 spacing rules as a wildcat that we could put the well 660
16 feet off the south line. But since that time we have
17 staked a location 1000 feet off the south line.

18 Q. Have you filed your APDs with the BLM for that
19 Section --

20 A. I'd have to talk to Mr. Greenlees about that. I
21 do not know that that's happened.

22 Q. I see. Is there any reason why you all can't
23 start the well in Section 33 before doing this re-entry
24 procedure?

25 A. Certainly. I mean, from an economic standpoint

1 to Devon, that would make no sense.

2 Q. And why is that? Because you have 100 percent of
3 the cost of the well?

4 A. Well, because it's a much -- That's correct, it's
5 a much cheaper entry. We wouldn't have 100 percent of the
6 cost, we'd have 50 percent.

7 Q. And in Section 4 you'd only have 12.5 percent of
8 that cost to bear?

9 A. I believe the cost of the re-entry would be
10 cheaper than the cost of a new drill.

11 Q. Right, and my question is, you only had 12.5
12 percent of that cost to bear there?

13 A. That's correct, although we offered to take a
14 significant portion more of the cost to earn an interest
15 throughout Section 4.

16 Q. I want to be clear on the sequence of events
17 here. As I understood your direct testimony, you seemed to
18 say that the letter under Tab 3 of Exhibit D, the September
19 20th, 2002, letter, was the first time you received a
20 proposal from Mr. Landreth about this prospect. Am I wrong
21 about that?

22 A. As far as a formal proposal, that's the first
23 that I can recall.

24 Q. Okay. Well, let's be clear here. Who generated
25 this prospect?

1 A. That is something that I'm not sure of. I know
2 in my conversations with EGL Mr. Brezina had represented
3 that he had generated -- or he had a Devonian idea in
4 Section 4, and at one point he had taken it to Mr.
5 Landreth, and Mr. Landreth didn't show much interest in it.

6 Q. I want to make sure I understand why you can't
7 answer that question. Is it because you weren't involved
8 with this prospect before September, 2002?

9 A. No, I was involved in the prospect before
10 September, 2002.

11 Q. Okay, so your recollection goes back how far,
12 datewise?

13 A. I did not start working southeast New Mexico, as
14 far as Devon's concerned, until about September of 2001,
15 following the Concho acquisition.

16 Q. All right, I'm still unclear. I think we need to
17 pin this down, because this is quite important. Is it --

18 A. Yeah, it's obvious we're not -- I don't
19 understand your question.

20 Q. Yeah, I just want to establish for the Hearing
21 Examiner, who took this proposal to who first?

22 A. As far as just the re-entry of the Rio Blanco
23 Number 1 well to the Devonian?

24 Q. Yes, sir.

25 A. EGL made a formal proposal on -- as we showed

1 you, on -- under Tab 2, March 15th of 2002.

2 Q. You'd received no communications, written or
3 verbal, from Mr. Landreth or from EGL before that time?

4 A. I could not recall that.

5 Q. Okay. Mr. Winchester, when did it first become
6 apparent to you that there was not a common understanding
7 among the parties over the size of this prospect in terms
8 of a 320-acre unit versus a 640-acre unit?

9 A. What type of unit are you referring to? The
10 proration unit?

11 Q. Any type at all.

12 A. It would have occurred after Mr. Landreth's
13 letter, or his comments on February 14th to Devon's
14 proposed form of participation and farmout agreement,
15 because within that document he did not request that the
16 north-half proration unit be changed.

17 Q. When we look at your exhibit under your Tab 8, as
18 late as December 17th, 2002, anyway, Devon for its part
19 anyway was still talking about a 640-acre -- what you call
20 working interest unit?

21 A. Correct.

22 Q. Did you make any effort at all to clarify with
23 Mr. Landreth or EGL that what we're talking about here is
24 spacing this well on 320 acres, not 640 acres, after that
25 point in time?

1 A. Obviously that was included in our participation
2 and farmout agreement.

3 Q. How about prior to that?

4 A. No.

5 Q. By the way, let's look under your Tab 26. That's
6 the transmittal letter for the BLM, and under that is the
7 prior APD, the sundry notice for the Rio Blanco well, and
8 under line item 10, what pool is reflected there?

9 A. EGL has listed the "Bell Lake; Devonian, North
10 (Gas)" Pool.

11 Q. And in fact that was approved by the BLM at one
12 time, was it not?

13 A. Yes, sir, it was.

14 Q. Getting back to this apparent misunderstanding
15 about the size of the spacing unit the parties apparently
16 had, in any of the communications you sent to EGL where you
17 might have referenced a 320-acre spacing unit for the well,
18 did EGL attempt to clarify that with you?

19 A. Not that I can recall.

20 Q. You don't recall being told that a 320-acre unit
21 was in error?

22 A. Not in error, but certainly in our meeting with
23 EGL, I mean, that was one of the main points we discussed.

24 Q. Okay. And which meeting was that?

25 A. That was the meeting that we had on March 13th

1 where I had flown to Midland to meet with them in their
2 office.

3 Q. Has Devon acquired any interest in Section 5?

4 I'm sorry -- Yes, Section 5?

5 A. No, sir.

6 Q. What is the proposed alignment for the spacing
7 and proration units in Section 33?

8 A. They would be laydowns.

9 Q. So we're talking at least one, potentially two
10 laydowns in Section 33 --

11 A. Yes, sir.

12 Q. -- on 320-acre spacing?

13 A. Yes, sir.

14 Q. Two laydowns in Section 4?

15 A. Yes, sir.

16 Q. Potentially two laydowns in Section 5, should
17 someone choose to develop the Devonian there?

18 A. That's correct.

19 Q. And as I believe I heard you indicate, you had
20 initially proposed staking your well in Section 33. You
21 say 660 off the --

22 A. A thousand feet off of the south line.

23 MR. HALL: I have nothing further, Mr. Examiner.

24 EXAMINER BROOKS: Redirect?

25 MR. KELLAHIN: Yes, sir.

REDIRECT EXAMINATION

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BY MR. KELLAHIN:

Q. In Section 4, Mr. Winchester, there's a party with an interest, Southwestern. I forget their whole name.

A. Southwestern -- you mean our -- the other partner -- the other party to the --

Q. -- to the spacing unit in the north half?

A. Yes, sir, Southwestern Energy Production Company.

Q. And what position has Southwestern Energy Production Company taken with regards to the competing Applications between the parties?

A. They forwarded to us -- if you'll look behind Tab 30, their election to participate in our --

Q. Tab 30?

A. Yes, sir, behind Tab 30 -- in our proposed re-entry operations, and then they say within that that the election serves to signify their support of Devon Energy Production Company, L.P., in the pooling Application.

Q. When we're looking at the first written proposal for the re-entry in Section 4, that first letter is the EGL letter of March 15th of last year?

A. Yes, sir.

Q. Prior to that proposal, had Devon already initiated internally this effort that the geophysicist has described about acquiring all this 3-D seismic data?

1 A. At least a year prior to that.

2 Q. Was Devon prepared to go forward with the re-
3 entry of the Number 4 well in Section 4 and to whipstock
4 that in the absence of having analyzed the 3-D data?

5 A. No, sir.

6 Q. As a follow-up to Mr. Hall's question, if you
7 look at Section 4, you have said that if Section 4 as a
8 whole section is dedicated to the well, it would dilute
9 your interest by half?

10 A. That's correct.

11 Q. In the south half of 4, if the south half of 4 is
12 a 320-acre spacing unit for Devonian production --

13 A. Yes, sir.

14 Q. -- would Devon have any interest?

15 A. No, sir.

16 Q. The south half of 4, then, could be drilled by
17 Mr. Landreth and EGL and they would have a 100-percent
18 well?

19 A. Yes, sir, that's correct.

20 Q. They would have the opportunity to utilize your
21 re-entry as a reason to drill the second well in the
22 section and learn from your results?

23 A. Yes, sir.

24 Q. I sense some underlying current that Mr. Landreth
25 may believe that you have somehow stolen his idea. Have

1 you tried to profit from his idea?

2 A. No, sir.

3 Q. Have you gone out and lost leases or acquired
4 leases?

5 A. We certainly have acquired leases after reviewing
6 the 3-D seismic data.

7 Q. In Section 33 there is a well, is there not?

8 A. In Section 33 there is no well.

9 Q. No well yet?

10 A. Yes, sir, there's no current production.

11 Q. In the north half of 4, was there any portion of
12 the north half of 4 for which a lease had expired after Mr.
13 Landreth is coming up with this idea where he could acquire
14 an additional interest?

15 A. Oh, no question, in the south half of the
16 northwest quarter of Section 4?

17 Q. The north half of 4.

18 A. That's right, in the --

19 Q. In the south half --

20 A. -- south half of the northwest quarter there is a
21 half interest held by First Roswell Company that actually
22 Devon had only earned an interest down to the base of the
23 Morrow formation. So that -- the Devonian rights have been
24 open for some time. Where I say "open", have been held by
25 First Roswell Corporation for some time.

1 No one had approached -- I say no one had
2 approached. We approached First Roswell Corporation last
3 fall and acquired a term assignment from them, so...

4 Q. It would appear to you that Mr. Landreth would
5 have had that same opportunity?

6 A. Yes, sir.

7 Q. Did you have a Devonian well in this area that
8 was unsuccessful? I think it was discussed this morning,
9 but I've lost track of where it is.

10 A. Oh, the well at Gaucho?

11 Q. I think so, Gaucho Number --

12 A. Yes, sir, the Gaucho Unit Number 1 well that was
13 drilled in 1996. Mr. Greenlees discussed that.

14 Q. What's happened to the acreage in that section?
15 Do you know?

16 A. We continue to hold that.

17 Q. As you understand it, Devon is -- believes this
18 is a wildcat well, and you're proceeding on 320-acre
19 spacing?

20 A. Yes, sir.

21 Q. And in the north half of Section 4, the parties
22 that have not yet agreed are going to be Mr. Landreth and
23 EGL?

24 A. Yes, sir.

25 Q. And you've obtained the necessary BLM approvals

1 for the re-entry of the well, for the north-half
2 dedication?

3 A. Yes, sir.

4 Q. And the EGL Application that makes reference to
5 the North Bell Lake-Devonian, behind Exhibit Tab 26, that
6 has been rescinded by the BLM?

7 A. Yes, sir.

8 MR. KELLAHIN: I have no further questions?

9 EXAMINER BROOKS: Did you have something?

10 MR. HALL: Just briefly.

11 RE-CROSS-EXAMINATION

12 BY MR. HALL:

13 Q. Mr. Winchester, since, as I understand it, Devon
14 had intended on creating a 320-acre unit from the start --
15 Am I wrong about that?

16 A. Yes, sir.

17 Q. I'm sorry --

18 A. No, that's correct, we have been, yes.

19 Q. All right. Why was it necessary for Devon to
20 talk about a 640-acre working interest unit at all?

21 A. Because we had, as I had stated earlier, made a
22 significant investment in the 3-D seismic, and what that
23 told us was that there was more prospective acreage, other
24 than in the north half of Section 4, so we wanted to
25 increase our interest in Section 4.

1 Q. And for the interest owners in the south half of
2 Section 4 to protect their correlative rights in the event
3 Section 4 is spaced on 320 acres, they will be compelled to
4 drill a new well; is that right?

5 A. Yes, sir.

6 Q. Nothing prohibiting them from doing that?

7 A. That's correct.

8 Q. Other than, in my view, the pool rules, but
9 that's another matter.

10 What do you understand the cost of drilling a
11 straight-hole new-drill Devonian well to be in this area?

12 A. I would have to defer to -- I'd just have to
13 defer to Mr. Greenlees for that.

14 Q. All right. Have you heard a figure of \$3.5
15 million tossed around before for Devonian drills?

16 A. That sounds like a high number from what I've
17 heard.

18 MR. HALL: Nothing further, Mr. Examiner.

19 EXAMINATION

20 BY EXAMINER BROOKS:

21 Q. Can you tell us what the working interest
22 ownership is in the north half of Section 4?

23 A. Yes, sir. Currently it would be Devon Energy
24 with 12.5 percent, Southwestern Energy with 12.5 percent,
25 EGL Resources with 25 percent, and Mr. Landreth with 50

1 percent.

2 Q. And Southwest Energy has joined with Devon?

3 A. Yes, sir.

4 Q. Now, what is the ownership in the south half?

5 A. In the south half it would be Mr. Landreth with
6 75 percent and EGL Resources with 25.

7 Q. Landreth 25 percent and EGL 75 percent?

8 A. Yes, sir.

9 Q. Vice-versa?

10 A. Vice-versa.

11 Q. Oh, okay, Landreth 75 percent --

12 A. Yes, sir.

13 Q. -- EGL 25.

14 Is this all federal?

15 A. Yes, sir, it is.

16 Q. The entire section, federal?

17 A. That's correct, there are three leases, yes, sir.

18 Q. Three different leases. How are they configured?

19 A. You have one lease that covers the northeast
20 quarter and the southwest quarter, and then you have a
21 lease that covers the south half of the northwest quarter
22 and a lease that covers the north half of the northwest
23 quarter.

24 Q. Is there any difference in the net revenue to the
25 working interests?

1 A. Yes, sir, but I'd have to just go through and
2 look, just because of reserved overrides and -- that
3 differ.

4 Q. When Mr. Hall asked you if this was -- the outer
5 boundary of this spacing unit was one mile from the outer
6 boundary of the pool that's been referred to, have you
7 checked the official plat of Section 5 on file with the BLM
8 to be sure that that is an irregular section and that it
9 actually is one mile?

10 A. I did not check on file, but we had a surveyor
11 take a look at that, and that is correct.

12 EXAMINER BROOKS: Thank you. I think that's all
13 my questions.

14 Mr. Catanach?

15 EXAMINER CATANACH: I have no questions.

16 MR. KELLAHIN: May we have a short break?

17 EXAMINER BROOKS: Certainly, I think that would
18 be a good idea.

19 MR. KELLAHIN: Thank you.

20 EXAMINER BROOKS: We'll take five minutes.

21 (Thereupon, a recess was taken at 2:25 p.m.)

22 (The following proceedings had at 2:33 p.m.)

23 EXAMINER BROOKS: Okay, are we ready to proceed?

24 MR. KELLAHIN: Yes, sir.

25 EXAMINER BROOKS: Back on the record.

1 MR. KELLAHIN: Mr. Brooks, that concludes our
2 direct case.

3 EXAMINER BROOKS: Very good. Mr. Hall?

4 MR. HALL: If that's the case I need to
5 distribute exhibits, if you'll give me just a minute?

6 EXAMINER BROOKS: I will.

7 MR. HALL: At this time, Mr. Examiner, we would
8 call Mr. Robert Landreth to the stand.

9 ROBERT E. LANDRETH,
10 the witness herein, after having been first duly sworn upon
11 his oath, was examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. HALL:

14 Q. For the record, please state your name, sir.

15 A. Bob Landreth.

16 Q. Mr. Landreth, where do you live and how are you
17 employed?

18 A. I live in Midland, Texas. I've been an
19 independent oil and gas producer for approximately 25
20 years.

21 Q. And your background and experience is in what
22 area?

23 A. Petroleum engineering. I worked for Texaco for
24 eight years before becoming an independent.

25 Q. All right. You've never testified before the

1 Division before, as I understand it.

2 A. That's correct.

3 Q. If you would please, give the Hearing Examiner a
4 brief overview of your educational background and a little
5 bit more about your work experience.

6 A. My degree is in chemical engineering from
7 Lafayette College in Pennsylvania. I went to work for
8 Texaco right out of college, working in field engineering,
9 mechanical design, then moved into the reservoir
10 engineering department, worked in that section for three
11 years, then in development drilling for a year, a total of
12 eight years before I became an independent producer -- or
13 became an independent.

14 Q. And your experience as an independent has been
15 primarily in the Permian Basin; is that correct?

16 A. Almost exclusively, yes.

17 Q. All right. You're familiar with the Application
18 that's been filed in this case on behalf of EGL Resources,
19 Incorporated?

20 A. Yes.

21 Q. And by the way, are you authorized to speak on
22 behalf of EGL in this proceeding?

23 A. Yes, I am.

24 Q. Are you familiar with the lands that we've been
25 talking about today?

1 A. Yes, sir.

2 MR. HALL: Mr. Examiner, we would offer Mr.
3 Landreth as an expert petroleum engineering witness.

4 MR. KELLAHIN: No objection.

5 EXAMINER BROOKS: So qualified.

6 Q. (By Mr. Hall) Mr. Landreth, if you would,
7 please, would you summarize what it is EGL and Landreth are
8 seeking by the Application in Case Number 13,049?

9 A. We are seeking a pooling of all interests in all
10 of Section 4 for the re-entry and deepening of the Rio
11 Blanco 4 Fed Com Well Number 1 to the Devonian formation at
12 a legal location in Section 4, under pool rules for the
13 Bell Lake North-Devonian Gas Pool. That's number one.

14 Secondly, approval of EGL Resources, Inc., as
15 operator and consideration of a risk penalty against
16 nonparticipants in this operation, should there be any.

17 Q. All right, let's look briefly at your Exhibit
18 Number 1. Does that identify Section 4, the spacing and
19 proration unit for this area?

20 A. It identifies Section 4. The 640-acre section is
21 obviously outlined. Also it shows surrounding lands.

22 Q. And let's turn to Exhibit Number 2.

23 A. Exhibit 2 is a summary of leasehold ownership,
24 which Mr. Winchester has pretty well gone through. It
25 shows ownership by individual tracts together with dates of

1 acquisition of those leasehold interests by the various
2 parties. It shows the location of the Rio Blanco Fed Com
3 Number 1 in the northwest quarter there, and then at the
4 bottom shows the ownership summary as would exist under a
5 640-acre spacing unit versus a 320-acre north-half spacing
6 unit.

7 Q. All right. And what is the projected depth for
8 your Devonian completion?

9 A. Approximately 15,000 feet.

10 Q. All right. If you could explain briefly to the
11 Hearing Examiner the chain of title to the EGL and Landreth
12 interest in Section 4.

13 A. Okay. I acquired my first interest in March of
14 1994 -- I'm sorry, February of 1994 -- subsequently, in
15 March, 1994, and the most recent was October of 1999.

16 EGL Resources acquired its half interest in those
17 two 160-acre tracts on March 1st, 2001.

18 Q. When did Devon acquire its interests?

19 A. In that 80-acre tract, Devon -- I don't know the
20 exact dates on some of that, but they acquired, I believe,
21 half of their interest, their current interest, in that
22 tract, probably a couple of years ago. And then the other
23 half interest was acquired in October of 2002.

24 Q. The other half interest is shown under
25 Southwestern Energy?

1 A. Well, it's our understanding this is not of
2 record, so we're going with information supplied by the
3 companies to us that those interests are shared, and so
4 we're making that assumption here.

5 Q. All right. Now, EGL does have the right to
6 utilize the existing wellbore for the Rio Blanco --

7 A. Yes, sir.

8 Q. -- 4 well, does it not?

9 A. Yes.

10 Q. And how is that so?

11 A. I -- Well, I paid my way on the drilling of the
12 original hole there, okay? Or I paid at least a portion of
13 it. EGL's predecessor-in-interest was Hunt Oil Company.
14 Hunt Oil Company farmed out their 25-percent interest for
15 the drilling of that well, and so effectively -- and then
16 that well did pay out -- and so effectively they paid for
17 their portion of costs out of production.

18 And so we are both -- each of us would be a co-
19 tenant in that wellbore.

20 Q. All right.

21 A. And in addition to that, this well did have an
22 operating agreement which has terminated by its own terms,
23 by lack of production for a two-year period. And the com
24 agreement would have also expired by its own terms.

25 Q. And that production was from the Morrow; is that

1 correct?

2 A. That's correct.

3 Q. Let's look at Exhibit 3. Does that show the
4 production history for Morrow production from the Rio
5 Blanco well?

6 A. Yes.

7 Q. And explain that. What's the date of last
8 production shown on there?

9 A. Well, the last date shown on this curve is right
10 close to the end of the year 2000, there's a modest amount
11 of production there, as you can see, for a few months,
12 which -- I'm not sure what that's attributable to. The
13 down time that you see is where the workover was done on
14 this well to recomplete to the Atoka, which I joined in
15 that effort. It was unsuccessful, and then the well never
16 really produced after that time.

17 Q. It apparently shows production after that
18 workover point. Why is that?

19 A. I really don't know. I don't know that it's a
20 big deal, I think it was probably just inadvertent on
21 Devon's part to report a little bit of production. I mean,
22 that's about 30 MCF a day, and I think they caught the
23 error and then realized that it, you know, was being
24 reported in error.

25 Q. So it was an administrative error then?

1 A. Well, I don't know, but I'm assuming.

2 Q. Apparently. But in fact, there was no production
3 after that --

4 A. Correct.

5 Q. -- workover?

6 What percentage of the acreage in the 640-acre
7 working interest unit is voluntarily committed to the re-
8 entry project?

9 A. 87.5 percent.

10 Q. Let's identify those owners and their ownership
11 percentages. Do you want to refer back to --

12 A. Okay, well, the committed --

13 Q. -- Exhibit 2 on that?

14 A. -- the committed owners are myself, 62.5 percent,
15 and EGL with 25 percent.

16 Q. Okay. Now, I'd like for you to outline for the
17 Hearing Examiner the efforts that you and EGL undertook to
18 try to secure voluntary participation of both Devon and
19 Southwestern in the project.

20 A. Okay. Well, this was a long process, as Mr.
21 Winchester has pointed out. We have a chronology that --
22 as Exhibit 4, that would probably best explain this. He's
23 been through a good portion of this.

24 Q. I'm sorry, that's Exhibit 4?

25 A. Exhibit 4, right.

1 Q. Okay, let's go through Exhibit 4.

2 A. Okay. It starts out with the chronology of the
3 drilling, how various -- you know, how my interest was.
4 Talks about the operating agreement.

5 Q. And you're looking in 1998?

6 A. Yes, the operating agreement between the parties
7 at that time, dated September, 1998.

8 Talks about the Morrow formation and the fact
9 that it ceased to produce, the attempted workover in the
10 Atoka and, like we've already stated, the lack of
11 production since really July of 2000.

12 Q. All right. Now in March of 2001, what happened
13 there?

14 A. In March of 2001 was when EGL acquired its
15 interest in the leasehold and a portion of the leasehold in
16 this section.

17 Q. All right. Now I want you to look at the entry
18 for May, 2001, and I want you to reflect back on some of
19 the testimony you heard from the Devon land witness about
20 who first proposed this project. Tell us about that. What
21 happened in May, 2001?

22 A. Okay. At that time we sent a complete package of
23 information, all of our geologic work, detailed geologic
24 work, maps, land ownership, in an effort to try to get
25 Devon interested in perhaps acquiring a part of this

1 prospect and drilling it. And we had some proposed terms
2 of trade in that brochure.

3 As we noted in the chronology here, Devon advised
4 us fairly early on that they were going to wait until this
5 3-D seismic shoot that they were thinking about
6 participating in would be finished. And then they did
7 ultimately send us a letter saying -- probably a month --
8 probably in June, I believe we have that letter -- in June
9 of 2001 sent us a letter saying that they were not
10 interested in pursuing the prospect.

11 Q. Now, at this point let's look at Exhibit 5. I'd
12 like for you to identify that at this point for the Hearing
13 Examiner. Is Exhibit 5 a compilation of the correspondence
14 exchanged between Devon and Landreth and EGL throughout the
15 course of events here?

16 A. It is not a complete summary, but it is some of
17 the more salient letters. But yes, it represents the trade
18 negotiations that have taken place, going back -- starting
19 in May of 2001, with our mailing of that brochure.

20 Q. All right. And if the Hearing Examiner requests
21 it, would you be willing to make available to him copies of
22 the entire set of correspondence back and forth?

23 A. Certainly.

24 Q. But this condensed version, it tells the story,
25 as far as you're concerned?

1 A. Yes.

2 Q. All right. I'm sorry, let's go back to the
3 discussion about the sequence of events in May, 2001.

4 A. Okay.

5 Q. And if you'd like to refer to the correspondence
6 in Exhibit 5, please do so.

7 A. Okay. I don't know if we noted, Mr. Winchester
8 in his summary failed to acknowledge this information that
9 we had sent to Devon in May of 2001.

10 Q. Was it Mr. Winchester's testimony that you didn't
11 bring anything to Devon until 2002; is that correct?

12 A. I believe that's correct.

13 Q. All right, I'm sorry. Go ahead.

14 A. So are we going to pick up, then, with the March
15 15th, 2002 --

16 Q. Yes, sir, let's go to that.

17 A. On that date was when EGL sent a letter proposal
18 and an AFE for -- proposing the re-entry operation on the
19 Rio Blanco 4 Fed Com Number 1 to everybody, all the working
20 interest owners, proposing a working interest unit
21 comprising the entire section. And you see the ownership
22 as it existed at that time.

23 Q. And that March 15th letter, March 15, 2002, is
24 contained in Exhibit 5?

25 A. I believe so. Yes. Yes, I know it is.

1 Q. Go ahead.

2 A. There was absolutely no response from either
3 Devon or Southwestern Energy to this proposal, and so
4 several months went by.

5 I had been, you know, working, trying to get
6 something done on this section for a Devonian test for a
7 good long time, and so I sent Devon a letter in September
8 of 2002 in which we pointed out, you know, our efforts to
9 try to get something done in here over a period of a long
10 time, and noting that Devon had never responded to any of
11 these proposals.

12 Q. Did you receive a response to that letter?

13 A. The first response we had to that letter was in
14 -- was this letter of Devon's of November 4th. And in the
15 meantime, we learned that Devon had acquired the interest
16 of First Roswell Corporation in the south half, northwest
17 quarter. And I would like to address that point if I may.

18 Both EGL and myself made written acquisition
19 proposals to First Roswell Corporation to acquire that
20 interest. The gentleman who owned it, I guess to say it
21 politely, was difficult to pin down. And we had several
22 proposals back and forth. It was obvious that he was
23 playing us against everybody else in there, and so we just
24 finally dropped it.

25 I referred to that tract in the packet that I

1 sent Devon in May of 2001, I specifically made reference to
2 that interest and said, you know, if we, Landreth -- if I,
3 Landreth, came up with a farmout on that interest, that it
4 would be included in our proposal to Devon on terms to be
5 negotiated at that time.

6 Q. Let's get back to the November 4th, 2002,
7 response from Devon.

8 A. Okay. Yeah, this was the first letter from
9 Devon. And as I've noted here, I think, having had no
10 interest from Devon at all previously, all of a sudden
11 Devon is very interested in trying to make some kind of a
12 deal with both EGL and myself, and so they made their first
13 proposal.

14 And then over the next several months we had a
15 lot of negotiations back and forth. Mr. Winchester has
16 detailed a lot of that. And as I also note, you know,
17 Devon continued to acquire interests in nearby lands which,
18 you know, we felt -- Well, you know, if we were going to
19 pay a portion of drilling this well, a substantial portion
20 of drilling the well, a re-entry in Section 4, then
21 certainly we ought to be entitled to an equivalent interest
22 in an adjoining lands that would be proved up by our
23 investment in that well, and that was a major stumbling
24 block that we were never able to work out with Devon.

25 And in fact, I would go on to say, I mean, as

1 soon as Devon got their trade made in Section 33, that's
2 when we got a letter saying, hey, we're going to finally
3 address your point, we are not going to share anything in
4 Section 33.

5 Q. So let me make sure we have the sequence. In
6 November and December, 2002, into January, 2003, there were
7 a significant amount of communications back and forth
8 between the parties?

9 A. Yes.

10 Q. And when you get into the time frame of February,
11 in Exhibit 5 it appears that the letters are out of
12 sequence. There's a letter, February 28th, 2003. Under
13 that there's a letter from EGL to Mr. Winchester dated
14 February 27th, 2003. What is that?

15 A. That was the letter that, you know, EGL finally
16 decided, you know, it doesn't look like we're going to
17 reach a voluntary agreement, so they sent a formal proposal
18 by certified mail to all the working interest owners with
19 an AFE and a JOA, also offering farmout terms in the event
20 Devon did not wish to join in EGL's proposal.

21 Q. All right. Now, prior in time to that, during
22 the course of these conversations, you received a letter
23 from Devon dated on its face December 17th, 2002, and it
24 looks like it's been corrected to show January 17th, 2003.
25 Do you see that there?

1 A. Yes.

2 Q. If you look at that letter, under numbered
3 paragraph 1, does it appear to you that at that time Devon
4 was still talking about a 640-acre unit?

5 A. In the letter with the corrected dated of January
6 17?

7 Q. Well, let me ask you your understanding at the
8 time -- your discussions with Devon. Were they talking by
9 this time about a 320-acre unit or a 640-acre unit?

10 A. There was never any discussion with Devon about
11 anything other than a 640-acre, at least, working interest
12 unit. There was never any mention of a proposal that there
13 would be anything other than a 640-acre spacing unit. We
14 assumed all along that's what we were talking about, so
15 there was never a mention that Devon's intent was, well,
16 yeah, it's a 640-acre working interest unit, but what we
17 really have in mind is a 320 spacing unit.

18 Q. All right. At any point in time, in your
19 communications to Devon, did you mention a 320-acre spacing
20 unit, inadvertently or otherwise?

21 A. I'm going to have to be honest here, and you may
22 have noticed me fumbling over there when Richard came
23 across the February 14th letter. I have to say that I
24 don't know what happened there. I can only say it was a
25 mistake.

1 There were, I think, provisions in there, and I'm
2 not trying to make excuses. But as I looked through there,
3 I mean, we copied verbatim portions of Devon's letter, you
4 know, and I probably told my secretary, Just copy all this,
5 or, you know, outlined it, Copy all this, put this in
6 there, make this change, make that change. And all I can
7 say is, I screwed up in that one instance.

8 I think it's clear from every other piece of
9 correspondence before and after that time that our intent
10 all along was a 640-acre working interest unit and a 640-
11 acre spacing unit.

12 Q. Now, your discussions also included AMI areas
13 outside of Section 4; is that correct?

14 A. That's correct.

15 Q. Including Section 33?

16 A. Right.

17 Q. What came of that?

18 A. Well, the key section, of course, was Section 33,
19 because I think we all foresaw the possibility. After all,
20 the re-entry is only 3700 feet off of that lease line. And
21 so if the structure extended up into there and we were
22 going to be proving it up, proving up a location there with
23 our re-entry, it was only reasonable that that should be
24 included in an AMI.

25 And Devon pretty much ducked that issue for a

1 good while, and then finally said that they were not
2 agreeable to sharing anything in that section.

3 We did -- They were willing to share anything
4 that was acquired in Section 5, which of course their
5 current interpretation shows this on the down side of a
6 fault, and in Section 4 to the south there.

7 Q. All right.

8 A. I'm sorry, Section 9 to the south.

9 Q. I want you to look again at your January 17th --
10 the January 17th letter from Devon.

11 A. Okay.

12 Q. The one with the corrected date on there. In
13 that letter -- Is that the letter where Devon advised you
14 that it would not allow you to participate in the interest
15 in Section 33?

16 A. Yes.

17 Q. There's a handwritten notation at the bottom of
18 that letter. Is that your handwriting?

19 A. Yes.

20 Q. And what's that all about, what were you saying
21 there? It's hard to read.

22 A. Do you want to get into that?

23 Q. Well --

24 A. I mean, it just basically says --

25 Q. -- convey to me what you were trying to express.

1 A. Okay.

2 Q. Were you disappointed?

3 A. What we found -- I mean, after we got this letter
4 we thought, Well, hmm. So I have -- you know, I have a
5 term assignment from OXY in the southeast quarter of
6 Section 4, okay, that doesn't have too much longer to run
7 on it.

8 And somewhere in here, not very long after this,
9 I called OXY's landman and said, Hey, I may want to talk to
10 you about extending that term assignment.

11 And he said, You know, interesting, we just made
12 a deal with Devon last week on our interest up in Section
13 33.

14 I said, Really, what did you do?

15 He said, Well, we gave them a term assignment, we
16 reserved a small override.

17 So that would have been in -- sometime in January
18 that that transaction apparently took place.

19 Q. All right. And as we go back to Exhibit 4, your
20 chronology, the entries in February 27th and February 28th,
21 by that time both the parties are filing their own final
22 well proposals. Does it appear to you that the parties are
23 going through the motions at that point? Have negotiations
24 ended at that point?

25 A. Yes.

1 Q. And then the Devon compulsory pooling Application
2 was filed on March 7th, 2003; is that right?

3 A. I believe that's the correct date.

4 Q. Okay. What I'd like to do now, Mr. Landreth,
5 based on your experience in the area, is have you discuss
6 your understanding of the geology of the Devonian in this
7 area. Could you do that, please?

8 MR. KELLAHIN: I'm going to object, Mr. Examiner.
9 Mr. Landreth has not been qualified as a geologist. It's
10 beyond his expertise.

11 MR. HALL: I'm offering him as being qualified to
12 opine based on his background and experience, extensive
13 experience in the Permian Basin. I think he can do that.

14 EXAMINER BROOKS: Okay, I'll overrule the
15 objection. You may continue.

16 Q. (By Mr. Hall) Why don't you give us a brief
17 overview of the Devonian in this area? And if you'd like
18 to refer to your exhibits, please do so.

19 A. Okay. I would start with Exhibit 6, which is a
20 structure map on a Morrow interval which is easily seen on
21 seismic data in this area. And what this shows -- And of
22 course you also have a lot of control here on the Morrow,
23 very little control on the Devonian obviously.

24 The Morrow is a very good indicator of deeper
25 structure, Devonian structure. And so what this simply

1 shows is, we show the Rio Blanco well. You can see that on
2 the top of the Morrow in that well it was slightly high,
3 30, 40 feet high to the Conoco Bell Lake 6 well over in
4 Section 6, two sections to the west, the key well that
5 we're all referring to here in all these proceedings.

6 And in addition to that it also shows that -- you
7 know, if you look at this area, you know, you can try to
8 make the geology really complex, but it really isn't all
9 that complicated. And the Morrow clearly shows that.

10 Q. So is the Morrow somewhat reflective of what
11 you'd expect to see in the Devonian?

12 A. Very close.

13 Q. All right.

14 A. Let's see, we put in a type log as Exhibit 6a,
15 just to show the Examiner what horizon we were mapping on,
16 that is, the middle Morrow C zone. That's a depth of what,
17 12,800 -- I'm sorry, that's 13,000 feet, which is only 1500
18 feet above where we expect to encounter the Devonian.

19 Q. And that well log is from the Conoco well in
20 Section 6?

21 A. Correct. And we used this log because, of
22 course, it went on down to the Devonian, so you can see the
23 relationship between the markers there.

24 Q. All right, let's look at Exhibit 7, the structure
25 map. Discuss that for us.

1 A. Exhibit 7 is a structure map on the Devonian
2 itself, subsea, showing of course the re-entry location and
3 how it should come in structurally to the control wells
4 back to the west. Again, it's based on the Morrow top, and
5 there shouldn't be much change going from the Morrow to the
6 Devonian. I don't think anybody would argue with that.

7 You can see that we're projecting that well to
8 come in about 40 feet high to the Continental well that
9 made the 31 BCF of gas.

10 It also shows the original gas-water contact for
11 this entire complex, which is based on the same line of
12 reasoning that Devon testified to. The drill stem tests
13 that took place -- and we've got this in a later exhibit
14 where we have the Conoco log showing all the drill stem
15 tests, clearly showing that there was, you know, gas and no
16 water recovered down to a subsea depth of -- in ours we say
17 minus 11,340. I think Devon said minus 11,360.

18 But what that shows is that you had a --
19 originally you had a gas-water contact here that
20 encompassed this entire area and in effect made this all
21 one pool, one reservoir.

22 Q. Now, this is a water drive pool in this area; is
23 that correct?

24 A. This is a very active water drive reservoir, yes.

25 Q. Are you saying that this same water drive

1 underlies all of these sections, 18, 7, 6, 5 and 4, from
2 what we see here?

3 A. Yes, as shown by the contour.

4 Q. All right. Now, you've located a fault in
5 Section 5, somewhat to the east where the Devon witnesses,
6 Mr. Hager, have located that. Do you want to discuss that?

7 A. Okay, that is a fault that we saw on our seismic
8 data, and here we only have 2-D data, but you can see we
9 had a line that ran northeast-southwest, very close
10 proximity to the critical control wells. And that fault --
11 I mean, I'm sorry, that line clearly showed us a fault.

12 And frankly we give it a little more throw than
13 Devon does. You can see on the west side of that fault
14 we've got a minus 11,131, on the other side a minus 11,271.
15 So we're giving that 140 feet of throw.

16 Q. And what did the Devon witness ascribe to that
17 displacement?

18 A. Fifty to 100 feet.

19 Q. All right.

20 A. Even with 140 feet of throw, you can see in the
21 way you have to contour this, I mean, there's no way that
22 fault can seal only -- It can seal a portion of the
23 Devonian, but it obviously cannot cut off, it cannot form
24 two distinct reservoirs when you have a gas column of 265
25 feet, which is very close to what Devon testified to.

1 A 140-foot fault will not cause isolation of a
2 265-foot gas column. And so consequently at one time you
3 had gas underlying this entire area, down to the original
4 gas-water contact.

5 Q. Is that also demonstrated by the relative
6 positions of the wells in Sections 6 and 18?

7 A. The common gas-water contact?

8 Q. Yes, sir.

9 A. I think -- yeah, what you find there is, Devon --
10 the Conoco well, you know, had a 30 -- Well, the Conoco
11 well was completed in 1960. BTA drilled a well in Section
12 18 in 1979, completed I believe in 1980, so 20 years later.

13 The BTA well produced -- You can see it was only
14 what, 60 feet structurally low to the Conoco well, and yet
15 it made a very small amount of gas and a huge amount of
16 water, indicating to us that the Conoco well -- which by
17 that time I can't tell you exactly how many BCF it had
18 produced, obviously a bunch -- had already pulled the gas-
19 water contact -- in this active water drive reservoir, it
20 had already pulled the gas -- the water level, that is,
21 well up into the structure here.

22 Q. Based on your contours as you've drawn them here,
23 how big a gas column was there in the Continental well in
24 Section 6 from your subsea?

25 A. Well, if you go from the 11,075 down to the

1 11,340, I hope that's 265 feet. I think that's what I --

2 Q. Give or take?

3 A. Yeah, it should be pretty close.

4 Q. All right.

5 A. I think that's --

6 Q. Would you have had a similar-size column for
7 the -- gas column for the well down in Section 18?

8 A. We would certainly expect that.

9 Q. And so what's -- Your cum production on the well
10 in Section 18 is what?

11 A. Less than a BCF.

12 Q. And to what do you attribute that difference
13 between the two wells?

14 A. Most of their gas column they'd already lost to
15 the Continental well.

16 Q. All right, so the Continental well in Section 6
17 was draining Section 18?

18 A. Yes.

19 Q. You don't see any low in Section 7 or any other
20 discontinuity between the well in Section 6 or Section 18,
21 do you?

22 A. The one seismic line that we have certainly did
23 not indicate the presence of any fault. I think Devon has
24 testified that they see no evidence of a fault. It looks
25 to us like it's just a very flat, broad structure there,

1 which again explains why the Conoco well was able to
2 produce so much gas.

3 Q. Yeah. Now, in view of what you've said about the
4 small displacement fault in Section 5, would you expect
5 that the reservoir in Section 6 is continuous all the way
6 over into Sections 5 and 4, in fact?

7 A. Yes, and we have further exhibits that we can get
8 into in a minute on that. But certainly the evidence to us
9 is clear that this had to be all one reservoir --

10 Q. Okay.

11 A. -- and still is, by virtue of the common gas or
12 the common water leg that will forever surround this thing
13 and feed the energy to maintain the reservoir pressure.

14 Q. Okay. Let's turn to Exhibit 8.

15 A. Okay.

16 Q. Would you identify that and explain that to us?

17 A. Okay, I guess you could call this a means of
18 trying to make a simple diagram out of, you know, what
19 looks like a fairly complicated structure map with various
20 contacts on it. Hopefully this might simplify it.

21 We show the original gas-water contact, and then
22 we show by virtue of the production from the Conoco well
23 what would have happened here, and I think you can easily
24 visualize that that water contact is going to move up in
25 this field as you withdraw gas from the Conoco well. And

1 it's going to continue to move up across the entire field
2 until it hits the bottom of that fault that separates,
3 partially, one area from the other. Okay?

4 And then at that point the water -- because of
5 the continued withdrawals from the Continental well, it's
6 going to continue to march up that gas column in that part
7 of the structure, whereas over here it's going to be
8 limited in how far up it can come, because of the throw on
9 that fault.

10 Q. And the fault you're identifying in the center of
11 that exhibit with the 140-foot throw, that's approximately
12 the same location as the fault identified by the Devon
13 geophysicist; is that correct?

14 A. That's correct.

15 Q. The one he ascribed a 50- to 100-foot
16 displacement on?

17 A. Correct.

18 Q. Mr. Landreth, in your opinion is the location of
19 the proposed completion of the Rio Blanco Fed 4 Number 1
20 well, well situated to recover all of the reserves being
21 targeted by both EGL and Devon in this case?

22 A. Absolutely.

23 Q. Now, should the Division grant Devon's proposals
24 to establish north-half units in this area, will it become
25 necessary for the interest owners in the south half of

1 Section 4 to drill an additional well to the Devonian to
2 protect their correlative rights?

3 A. That would certainly be an outcome, yes. In that
4 case, obviously, I am being disadvantaged. I only have a
5 50-percent interest in the north half, I have a 75-percent
6 interest in the south half, so certainly it wouldn't be
7 very long before I would be moving to drill a well in that
8 south half, and probably as close as I could get to the
9 first well because the structure -- I want to maximize the
10 structural position of that well.

11 So as a practical matter what happens is, you're
12 going to have two wells a quarter of a mile apart draining
13 the same reserves. The well that's drilled in the south
14 half isn't going to recover one additional cubic foot that
15 that well in the north half wouldn't otherwise recover.

16 Q. What's your opinion? Is this area best developed
17 on 640s or 320s?

18 A. 640s.

19 Q. In terms of additional wells in the area, you're
20 also looking at a well we know Devon is planning in Section
21 33 to the north, correct?

22 A. Yes.

23 Q. And there's two potential laydown units in
24 Section 5, correct?

25 A. That's possible, also in Section 9.

1 Q. Do you know what the current going rate would be
2 to drill a Devonian well in this area, new drill?

3 A. Our estimate is \$3.5 million. I know Devon's
4 engineer, Bill, testified to something considerably lower
5 than that. I have participated with Devon in Morrow wells
6 in this very immediate area, drilled to depths of 13,500
7 feet, where we're spending \$2.1 to \$2.8 million to complete
8 those at that depth. And that goes back a couple years
9 ago, so I cannot imagine that we're talking about a well
10 less than \$3 million to go to 15,000 feet and set the extra
11 casing, et cetera, to accomplish that.

12 Q. Okay. Let's look at Exhibit 9.

13 A. Okay.

14 Q. This is your cross-section here. What does that
15 show?

16 A. This is a cross-section that shows the three
17 wells that were drilled over in the west side of the
18 structure, the Continental well and two very -- much more
19 recent Amerada Hess wells. It shows the results of tests
20 taken on those wells. Again, Bill Greenlees referenced, I
21 believe, some of this test data.

22 And the objective here was twofold: first of all
23 to establish the original gas-water contact in the Conoco
24 well, and secondly to show that water has obviously moved
25 well up into the structure at distances three-quarters of a

1 mile away from the Conoco well, again indicating that for
2 all intents and purposes the Bell Lake Pool is well over
3 into Section 5, just by virtue of the production history of
4 these wells.

5 Q. All right. Let's look at Exhibit 10.

6 A. Okay.

7 Q. What does this show to the Hearing Examiner?

8 A. This is simply a history curve of the Bell Lake
9 Unit 6. I guess what we really wanted to show here was the
10 increasing water production with time. You can see this
11 well is essentially abandoned now. It was producing --
12 when it was still making a reasonable amount of gas and
13 water, it was making about 800 MCF a day and 700 barrels of
14 water a day, having made no water originally.

15 Q. All right. Now, let's turn to Exhibit 11. I'd
16 like you to discuss that, please, sir.

17 A. Okay, this was an effort on my part to try to
18 quantify volumetrically the reserves from the Conoco well,
19 the Conoco Bell Lake 6 well. I think we've already
20 testified -- you know, it's obvious this well has drained a
21 very large area. But even on a conservative basis, looking
22 at, you know, open hole logs -- and that's basically what I
23 did here, we just looked at the logs, counted up feet of
24 pay above a 3-percent porosity cutoff.

25 You can see the average porosity from the sonic

1 log and a dolomite, water saturation, original reservoir
2 pressure from the drill stem test, and so on. You take all
3 that data and put it into material balance formula, and
4 this is what you generate in the way of recoveries per acre
5 -- well, per acre-foot first. And then if you have 74 feet
6 of pay you can see the recovery per acre.

7 You assume, I think -- I don't think anybody
8 would argue that in a reservoir like this you'd recover 90
9 percent of the gas in place. So if you take the cumulative
10 production and divide it by that recovery-efficiency
11 figure, you might say, it works out to 824 acres drained.

12 Q. So there's a drainage area of 824 acres by that
13 well?

14 A. Conservatively.

15 Q. And it's -- I assume everybody's hope,
16 expectation, that new Devonian completions in this area
17 would have similar producing and drainage characteristics?

18 A. That would certainly be nice.

19 Q. These rather large drainage areas that you
20 conclude exist in the Devonian in this area, is that also
21 what the Division previously concluded in Case Number 6962?

22 A. 6962.

23 Q. If you'd look at Exhibit 12.

24 A. Okay.

25 Q. What is that?

1 A. Okay, Case -- I'm sorry, I was thinking of the
2 order number, which was what was in my memory. Yeah, this
3 was -- When BTA drilled its well, its pool extension down
4 there in Section 18, they came to the Division and asked
5 that the pool rules be extended down into Section 18.

6 The Division looked at all the evidence and
7 concluded -- I can see on page 2 in items 5 and 6, they
8 first concluded that, The evidence presently available
9 indicates that the Bell Lake 6 and BTA's well are indeed
10 producing from a single common source of supply in the
11 Devonian and that the North Bell Lake-Devonian Gas Pool
12 should be extended to that well.

13 Secondly, That the evidence further indicates
14 that one well is capable of -- in this pool, is capable of
15 draining 640 acres and that that should be the standard for
16 the future with 1650-foot distances off of lease lines.

17 Q. Now, with respect to the subject lands here,
18 Section 4, were these lands previously pooled by the
19 Division?

20 A. Yes, they were.

21 Q. When?

22 A. I believe 1991.

23 Q. And what pool rules did the Division apply in
24 that case?

25 A. Bell Lake North-Devonian Gas Pool.

1 MR. HALL: Mr. Examiner, we ask that you take
2 administrative notice of Order Number R-6493 in Case Number
3 10,267.

4 EXAMINER BROOKS: Okay, we will take
5 administrative notice, as requested.

6 Q. (By Mr. Hall) Mr. Landreth, is EGL and yourself
7 seeking a 200-percent risk penalty in this case?

8 A. Yes.

9 Q. And upon what do you base that 200-percent
10 recommendation?

11 A. The combination of geologic and mechanical risk
12 involved in doing a re-entry of this nature.

13 Q. What's the geologic risk?

14 A. It's pretty much the same thing that Devon
15 testified to. You could have a lack of porosity, you could
16 have fractures extending into the water column, I suppose,
17 you could have any number of things that might cause the
18 well not to produce as expected.

19 And in addition to that you would have, you know,
20 just the mechanical risk when you're drilling with small
21 drill pipe and so on, of just getting the hole down.

22 Q. All right. Let's look at your well costs in
23 Exhibit 13. Would you go over those for the Examiner,
24 please?

25 A. Yes.

1 Q. What's the total for a completed well?

2 A. \$1,015,905.

3 Q. And dryhole?

4 A. \$825,000.

5 Q. And are those costs in line with what's being
6 charged by other operators in the area?

7 A. Yes. You know, we don't have a major quibble
8 with Devon's AFE. I think they have a little more detailed
9 procedure, a little more careful procedure as far as doing
10 the sidetrack operation.

11 Q. Well costs of both parties are reasonable, then;
12 is that what you're saying?

13 A. I wouldn't argue with Devon's costs.

14 Q. Okay. And what overhead rates for drilling and
15 producing are you asking for in this case?

16 A. \$500 per month producing well rate and \$5000 per
17 month drilling well rate.

18 Q. And likewise, are these rates commensurate with
19 what's being charged in the area?

20 A. Yes.

21 Q. You're recommending that these rates be
22 incorporated into the pooling order that results from this
23 hearing?

24 A. Yes.

25 Q. Are you also requesting the order provide for an

1 adjustment to the drilling and producing overhead rates in
2 accordance with the current COPAS bulletin?

3 A. Yes, although EGL was willing to limit those to a
4 maximum of \$700 per month and \$7000 per month respectively.

5 Q. All right. Get back to the spacing issue again.
6 What is the prevailing development pattern for the Devonian
7 formation --

8 A. I should say that that was put into the operating
9 agreement that was circulated also, that those rates would
10 be limited to those figures. I'm sorry.

11 Q. All right. Again, I want to talk some more about
12 the spacing issue. What is the prevailing development
13 pattern in this area for Devonian formation wells?

14 A. For Devonian?

15 Q. Yes, sir.

16 A. 640 acres, without exception.

17 Q. And Antelope Ridge-Devonian Gas Pool to the
18 south, is that on 640s as well?

19 A. Yes, it is.

20 Q. If we go to 320s in this area, is there a
21 substantial likelihood that the drilling of unnecessary
22 wells will result?

23 A. Certainly, and a considerable number.

24 Q. And is there an adverse -- an additional adverse
25 consequence stemming from that? Significant number of

1 wells drilled on 320s, all pulling from the same reservoir,
2 what's the down side to that?

3 A. Well, of course first of all it's a terrible
4 economic waste. I've already referenced the fact that I
5 would be forced to protect my interest in the south half,
6 so I've got to spend my share of \$3 million to drill a well
7 to recover the same reserves that can be recovered by a
8 well that only costs a million dollars.

9 The other big thing in here, which I think is
10 just huge, is, this is a water drive reservoir. So if you
11 open up the door and you let everybody drill on 320-acre
12 spacing, then it's going to be a dogfight for those
13 reserves. And this is not like your Morrow or some other
14 reservoir, you know, where you could probably get away
15 without too much left behind. This is a water-drive
16 reservoir, and if everybody's competing for those reserves,
17 there's a very good chance that you're going to cone water
18 prematurely in this field.

19 Q. And will that lead to the premature
20 abandonment --

21 A. Yes.

22 Q. -- of reserves?

23 Specifically with respect to the economics of
24 developing Section 4, what's the difference in well costs
25 you're looking at to capture the reserves underlying that

1 section from the re-entry proposal, as opposed to two wells
2 developed on 320s? What's the cost of that?

3 A. We're looking at the difference on our AFE of one
4 million dollars versus \$4.5 million.

5 Q. By developing Section 4 from a single wellbore,
6 would you be able to avoid any additional waste to the
7 surface resources of Section 4?

8 A. You'd avoid drilling one location and the surface
9 disturbance associated with that.

10 Q. You're supporting EGL's request that EGL be
11 designated operator of the well?

12 A. Yes.

13 Q. Why is that?

14 A. Because I believe they're capable of doing the
15 job, and at this point the two of us together have 87.5
16 percent of a 640-acre spacing unit, and I think that only
17 makes sense.

18 Q. All right. Isn't it accurate to say that EGL was
19 the first to develop this prospect?

20 A. I would say, you know -- I mean, we've already
21 pointed to the fact that, you know, I sent a packet on this
22 two years ago to Devon and then EGL had their own. I mean,
23 we both had the concept of pursuing this well for the
24 Devonian. Did I answer your question?

25 Q. Yes.

1 A. Okay.

2 Q. In your view, did you and EGL make a good faith
3 effort to obtain the voluntary participation of both Devon
4 and southwest in this re-entry well?

5 A. Yes.

6 Q. And in your view would granting EGL's Application
7 be in the best interests of conservation, the prevention of
8 waste, protection of correlative rights?

9 A. Yes.

10 Q. Did you participate in the creation of Exhibits 1
11 through 11 and 13?

12 A. Yes, each and every one, with -- you know, with
13 some exception to Exhibit 13, the AFE which was prepared by
14 the drilling engineer who consults for EGL. He and I
15 talked about that. I mean, we talked about it and the
16 procedure to be used, but to be candid the actual figures
17 shown there are his.

18 MR. HALL: All right. At this point, Mr.
19 Examiner, that concludes our direct of this witness. We
20 would tender into evidence Exhibit 1 through 13. We would
21 also provide you with Exhibit 14, which is the notice
22 affidavit for this case.

23 Pass the witness.

24 MR. KELLAHIN: No objection.

25 EXAMINER BROOKS: Okay, Exhibits 1 through 14 are

1 admitted.

2 Mr. Kellahin?

3 CROSS-EXAMINATION

4 BY MR. KELLAHIN:

5 Q. Mr. Landreth, as part of your study and
6 preparation in this area did you do any mapping or
7 engineering calculations on the Antelope Ridge-Devonian to
8 the south?

9 A. No.

10 Q. It's spaced on 640-acre spacing, is it not?

11 A. I believe that's correct.

12 Q. Let me use Exhibit B-1 as an illustration, bring
13 it over a little closer.

14 Outlined in red is the boundary of that 640 pool,
15 is it not? Do you know otherwise?

16 A. I do not know exactly, but I would say the
17 boundary is very close.

18 Q. Have you made any effort to estimate the actual
19 affected acreage within that pool by those four wells?

20 A. It's been a good while. We did do some study of
21 that field. It has similar -- In some ways it has some
22 similar characteristics to the pool, the Bell Lake-Devonian
23 North, in that wells drilled much later -- you know, the
24 highest wells on that structure were drilled later in the
25 life of it, as I recall. Water was still a problem, as I

1 recall.

2 Q. With 640-acre spacing, there ended up to be four
3 wells in that feature?

4 A. It appears that way.

5 Q. Would you disagree with me that there are about
6 800 acres within the area contained above the water
7 contact?

8 A. I would not disagree with you.

9 Q. In actuality, despite the spacing size, it would
10 appear that four wells are sharing about 800 productive
11 acres?

12 A. That is true, and obviously -- you can look at
13 that and see that there were definitely lease-line
14 considerations there. People were crowding lease lines to
15 get the top of the structure, which resulted in a well
16 being drilled that shouldn't have been drilled. But they
17 had a correlative-rights issue, clearly, there.

18 Q. As part of your work as an independent landman,
19 Mr. Landreth, are you familiar with joint operating
20 agreements?

21 A. Pretty much.

22 Q. Do you have someone review those agreements for
23 you, or do you do that yourself?

24 A. I pretty much do it myself.

25 Q. Are you familiar with the standard forms

1 generally circulated among interest owners for joint
2 operating agreement forms?

3 A. Pretty much, yes.

4 Q. Are you aware that all those forms in use have a
5 provision in them that whatever well is drilled pursuant to
6 the joint operating agreement will be spaced in accordance
7 with Division Rules?

8 A. I know there's a provision that says that without
9 the consent of all parties no well can be drilled that
10 doesn't conform to then-existing spacing patterns. I'm not
11 sure about...

12 Q. Let me go about this another way. If your
13 negotiations with Devon are discussions about a working
14 interest owner unit consisting all of Section 4, is that
15 different from or the same as 320-acre spacing units?

16 A. It depends on what's being proposed.

17 Q. If I propose to you that you join with me in a
18 working interest owner unit --

19 A. Uh-huh.

20 Q. -- that is larger than the spacing units approved
21 by the Division for that section, I can still do that with
22 you as an agreement among working interest owners?

23 A. Yes.

24 Q. And pursuant to those working interest owner
25 forms, the joint operating agreement, then there's an

1 arrangement by which the parties within the section can
2 make decisions about wells drilled in conformance with the
3 spacing dictated by the Division?

4 A. I think that's true.

5 Q. Do you have a letter from Devon that you can show
6 me in which they make specific reference to using 640-acre
7 spacing units?

8 A. Actually, I don't think we do have such.

9 Q. The correspondence is reference --

10 A. 640-acre --

11 Q. -- working interest --

12 A. -- working interest units.

13 Q. Okay. Let me ask you about your interest in
14 Section 4. Did I remember correctly that you acquired your
15 first interest in Section 4 in about 1996?

16 A. 1994, I believe.

17 Q. 1994.

18 A. Yes, sir.

19 Q. And where was that interest in Section 4?

20 A. I believe that one was in the north half,
21 northwest quarter.

22 Q. When was the Rio Blanco Number 4 drilled, Mr.
23 Landreth?

24 A. 1998.

25 Q. And so at the time that well was drilled, you

1 were a working interest owner in the spacing unit in the
2 north half of 4?

3 A. Correct.

4 Q. Who was the operator at that time for that well?

5 A. Santa Fe Energy.

6 Q. So Santa Fe Energy was the operator under that
7 operating agreement?

8 A. Yes.

9 Q. And they would have made a proposal to you as a
10 working interest owner for signing off on an AFE and
11 participating in the well we're talking about now?

12 A. Okay, well, they made a proposal to drill a well.
13 There was no operating agreement at that point in time.
14 Then the operating agreement was obviously a part of that.

15 Q. I stand corrected. So at the time they were
16 putting together a deal for that well, you were included
17 among the working interest owners to participate in that
18 well down to the Morrow?

19 A. That is correct.

20 Q. Did you advise Santa Fe that you had any
21 expectation that that well should be deepened to the
22 Devonian?

23 A. Not at the point in time when it was drilled,
24 when it was spudded.

25 Q. Right. After the well was drilled, did you have

1 an expectation that you should have continued to drill that
2 well to the Devonian?

3 A. I did express when we got down and got the well
4 logged and it looked like it was obviously high on the
5 Morrow, I called Santa Fe to say, I wonder if we shouldn't
6 look at the possibility of taking this well on down to the
7 Devonian.

8 Q. When was that done, approximately?

9 A. Well, I can tell you that it was right around
10 Christmastime, because --

11 Q. I'm just looking for a year.

12 A. Yeah, I guess December of 1998.

13 Q. Okay. And for whatever reason, the well didn't
14 get below the Devonian?

15 A. Correct.

16 Q. I'm sorry, between the Morrow, to the Devonian.

17 So we have from 1998 until September 20th of last
18 year, that you had made a proposal to Devon about deepening
19 this well to the Devonian?

20 A. My first proposal was in May of 2001, and
21 actually I had sent a letter out even prior to that, to the
22 parties -- the owners -- I can go back and get it, probably
23 1999. We didn't make an issue of it, but asking the
24 parties to consider drilling a well to the Devonian with
25 the option to go to the Ellenburger.

1 Q. And that still has not happened?

2 A. Correct.

3 Q. What is the expiration date of your interest in
4 the north half that has to be satisfied by further
5 production out of this well?

6 A. In the north half?

7 Q. Yes, sir.

8 A. March of 1994 -- I'm sorry, March of '04.

9 Q. So you have till March of '04 to get production
10 in the north half?

11 A. Well, I think if we were drilling it we would
12 satisfy the requirement.

13 Q. You could drill over the end of the term?

14 A. Yes.

15 Q. In Section 4, in the south half, that is an
16 arrangement -- a term assignment from OXY, if I'm correct?

17 A. Correct.

18 Q. When does that term assignment expire?

19 A. October of this year.

20 Q. Can you extend under the terms of that term
21 assignment your interest in the south half if a 640-acre
22 spacing unit is dedicated to the Rio Blanco 4?

23 A. Can I extend it?

24 Q. Yeah.

25 A. Well, if the well is spudded timely on a 640

1 spacing unit, it's automatically extended.

2 Q. That would perpetuate your interest?

3 A. Yes, sir.

4 Q. In the south half of 4 there is an old well in --
5 I can't see that far, but I think it's in the southwest
6 quarter of 4. Do you see that?

7 A. Yes, sir.

8 Q. I don't know the well name, but there is a
9 wellbore in the south half of 4. As part of your
10 acquisition of the term assignment from OXY, do you control
11 that wellbore? Do you have access to that wellbore?

12 A. Not by virtue of the term assignment from OXY,
13 no.

14 Q. Right. When did you get your term assignment
15 from OXY? Approximately when?

16 A. Sometime in 1999, I believe. October of 1999. I
17 believe that date is on Exhibit 2.

18 Q. So by October of 1999, after the point in time
19 where you believe that the Devonian is a potential prospect
20 in Section 4, you acquire an interest from OXY by term
21 assignment?

22 A. Correct.

23 Q. Did you examine the possibility of taking that
24 well in the southwest quarter of 4 and utilizing it as a
25 re-entry in the same fashion we're proposing to re-enter

1 the Rio Blanco 4?

2 A. No.

3 Q. And what, if anything, is wrong with that
4 wellbore that prevents you from doing that?

5 A. It doesn't have nearly the advantageous
6 structural position that the Rio Blanco 4 Fed Com Number 1
7 does.

8 Q. Okay. Would it still -- Have you examined the
9 cost components of that to see if it's reasonable
10 economically to enter that wellbore and simply
11 directionally drill it to a more favorable bottomhole
12 location in the south half?

13 A. We did look at the economics of directionally
14 drilling the Rio Blanco Number 1, and concluded that it was
15 quite expensive and quite risky and kind of backed away
16 from it.

17 Q. Do you have an AFE prepared for illustration to
18 show us what you estimate a new drill to be in the north
19 half of 4 to access the Devonian?

20 A. I do not have an AFE with me, no.

21 Q. Mr. Greenlees, I think, was talking in terms of
22 maybe \$1.7 million. Do you dis- --

23 A. I don't remember if that was a completed well or
24 just the dryhole cost.

25 Q. Well, let me ask you, rather than you ask him.

1 What in your opinion is a completed well cost for a new
2 drill?

3 A. I would say easily \$3 million.

4 Q. And what would be the dryhole cost?

5 A. 2.5 to 2.6.

6 Q. Let me ask you about some of the technical stuff.

7 If you'll pull out your Exhibit 7 --

8 A. All right, sir.

9 Q. -- you mentioned that this map had been prepared
10 by utilization of a single 2-D seismic line?

11 A. There were actually two 2-D seismic lines, and
12 you can see those -- the one that I referred to, northeast-
13 southwest, and then there's another line that runs north-
14 south, plus of course all of the well control.

15 Q. Yeah. Well, let's look at the 2-D first. I see
16 the point, and I want to make sure that I can find them on
17 this display. If I start from north to south and if I go
18 up on the section line between Section 29 and 28, there's a
19 shot point, 11,453, on my map.

20 A. Yeah, that's actually a subsea depth.

21 Q. If I follow that line, though, and connect all
22 those points right down the dividing line running north and
23 south between those sections, am I finding one of those 2-D
24 seismic lines?

25 A. I'm not sure I understood that, Tom. The seismic

1 line traverses the west section line of 28, 33, 4, 9 --

2 Q. Let's do it the short way.

3 A. Okay.

4 Q. Would you take my red pen and mark on it and show
5 me the two lines so I can find it?

6 A. All right, sir.

7 Q. If you'll take my copy of that exhibit.

8 Thank you.

9 Mr. Examiner, may I show you what Mr. Landreth --

10 EXAMINER BROOKS: You may.

11 Okay, so our record will be complete, can we get
12 Mr. Landreth to make a similar marking on at least one
13 other copy of the exhibit so we can make it part of the
14 record?

15 MR. KELLAHIN: May we do on your copy?

16 EXAMINER BROOKS: You may do so.

17 Okay, at the conclusion of the hearing I will
18 give this copy of Exhibit 7 to the honorable reporter.

19 You may continue.

20 MR. KELLAHIN: Thank you.

21 Q. (By Mr. Kellahin) Mr. Landreth, what
22 geophysicist did you use to assist you in analyzing the 2-D
23 seismic data?

24 A. His name is Chuck Holmstrom, in Midland.

25 Q. Is he associated with a geophysical firm, or is

1 he --

2 A. He's an independent, he does it as a consultant.

3 Q. Did he tell you where to put that line on this
4 map?

5 A. Did he tell us where to put this line on this
6 map?

7 Q. Well, try it again. In preparation of this
8 exhibit, did you show him this contour map and ask him to
9 impose the 2-D lines?

10 A. If I understand your question, no. He picked the
11 data. The geologist who works with me --

12 Q. Is whom?

13 A. Scott Tanberg.

14 Q. Did Mr. Tanberg prepare this map?

15 A. Yes.

16 Q. What data on this map did you put on this map?

17 A. Well, I mean, obviously he and I work in close
18 conjunction. He doesn't need my help to contour -- you
19 know, to contour the Devonian. We did have a discussion
20 about the gas-water contact, and so I had him put --
21 particularly on the revised gas-water contact, a new gas-
22 water contact as it appears on the east side of this
23 reservoir.

24 Q. Did he make a preliminary structure map on top of
25 the Devonian that you provided to the geophysicist so he

1 could see in what ways to adjust the contours?

2 A. What he would have done would have been to do an
3 interval map, probably from the Bone Springs to the base of
4 the Woodford, to give the geophysicist that -- and I think
5 their geophysicist referred to this as well. I mean,
6 that's the obvious interval to use as an interval. And
7 that is what you use to -- as your -- how can I say it? --
8 standard -- I'm not a geophysicist here, but you take that
9 and add to it, I guess, your time -- You're going to get me
10 lost here.

11 I'm not a geophysicist, but to answer your -- I'm
12 going to answer your -- Okay, the geologist who works with
13 me furnished what is typical to be furnished to a
14 geophysicist in the way, you know, of points from well
15 control so that he can say, Okay, well so on this well
16 right here I know that the interval from the Bone Springs
17 to the base of the Woodford is 8000 feet. And so he can
18 use that as his reference point to adjust data if he needs
19 to, okay? Or to tie it to that well.

20 Q. So the methodology is that when I look at this
21 map, it's devoid of any 3-D seismic interpretations?

22 A. That is true.

23 Q. And when I look at the 2-D lines that's been
24 provided by this independent geophysicist and it's been
25 integrated by your geologist into this structural contour

1 map?

2 A. Correct.

3 Q. When I look at the fault that runs east-west
4 through Sections 33 and 32, I'm looking for any log data
5 that controls that fault. I see none. Am I reading that
6 right?

7 A. That's essentially true.

8 Q. And so the only way I know the interpretation
9 warrants that fault is to look at the single north-south
10 2-D seismic line?

11 A. That's correct.

12 Q. And from there the geologist has inferred a
13 northern boundary to the Devonian reservoir that we're
14 trying to collectively access in Section 4?

15 A. That is basically correct.

16 Q. The other fault I see on here is north-south
17 through Section 5. Am I correct in assuming that the
18 north-south fault line through Section 5 is placed on this
19 map exclusively based upon the 2-D line that the fault
20 crosses through?

21 A. That is correct.

22 Q. Okay. When we look at the Number 6 well in
23 Section 6, the big well that's made the 31 BCF of gas -- Do
24 you see that one?

25 A. Yes.

1 Q. Did your geologist or did you look at the log of
2 that data and look at where the drill stem tests were taken
3 at the lowest known gas and thereafter the highest known
4 water off the drill stem tests on the log for that well?

5 A. Yes.

6 Q. When we impose the lowest known gas in the
7 wellbore of the Number 6 well, can you relate that to this
8 structural contour map and give me a depth?

9 A. A depth of what?

10 Q. The lowest known gas or the highest known water.

11 A. Well, the lowest known gas is the figure that we
12 have shown on Exhibit 9 at minus 11,340. That's where gas
13 was tested, plus or minus three or four feet.

14 Q. When we compare the gas-water contact that's
15 shown by your geologist to the one presented by Devon,
16 Exhibit B-1, and you look at the gas-water contact that we
17 have interpreted, it's substantially different than the one
18 your geologist has picked, is it not?

19 A. I don't think so.

20 Q. No, sir?

21 A. They're showing minus 11,360, we're showing it
22 11,340, so there's a 20-foot difference in a 265-foot gas
23 column.

24 Q. If you'll look into Section 7, and we see the
25 limits of the gas-oil contact here --

1 A. Uh-huh.

2 Q. -- that is substantially north --

3 A. Oh, the limits of it.

4 Q. Yeah, the limits are substantially north as shown
5 on your display.

6 A. Well, I guess that is interpretation.

7 Q. Okay. Did you analyze the log for the well in
8 the southwest quarter of 5 to see that within the Devonian
9 interval it was tested wet through that entire interval?

10 A. Yes, sir.

11 Q. And then just west of that wellbore you're
12 presenting a fault that separates --

13 A. East of that wellbore.

14 Q. Yeah, east of that well in a north-south
15 direction, there's the fault that's on the 2-D seismic.

16 A. There is a fault.

17 Q. Explain to me why the Devonian reservoir that's
18 being produced out of the great big well in Section 6 is
19 not disconnected from Section 4 because of the wet log and
20 the fault that appears to separate the two.

21 A. Well, I think to analyze that it would be best to
22 go to Exhibit 8, if I can find it, where we show -- we show
23 the Conoco well, we show the fault, we show the other
24 portion of the structure to the east, and you can see that
25 you have a gas-water contact that to us looks clearly to be

1 common to both sides of the reservoir.

2 Q. Have you analyzed enough 2-D lines to tell you
3 across Section 5 and the sections north and south of 5 what
4 we can expect to be the terminating points of that fault
5 between the two areas?

6 A. We only had one seismic line, but I think our
7 geologist did a great job without having 3-D. He's got the
8 fault in the exact same place, basically, that Devon has
9 it, with about the same extents going north and south.

10 Q. Would you find your exhibit that has the
11 volumetric calculation, and give me a second to find mine?

12 A. All right, sir.

13 Q. Mr. Landreth, I have your Exhibit 11. Is this
14 your calculation and your work product?

15 A. Yes, it is.

16 Q. And this is the volumetrics for the big well, the
17 Conoco well in Section 6?

18 A. Yes, sir.

19 Q. And you have calculated 824 approximate acres of
20 drainage affected by that well?

21 A. That is one way of determining the drainage
22 radius for that well.

23 Q. Did you attempt to take that drainage area and
24 fit it within a certain contour size and shape that's
25 depicted on any exhibit prepared by one of your geologists?

1 A. No.

2 Q. When we look at the reservoir parameters that
3 you've chosen, you've used a 3-percent porosity cutoff?

4 A. Yes, sir.

5 Q. How did you reach the 3 percent?

6 A. Goes back --

7 Q. We're in a carbonate reservoir and dealing with
8 certain kinds of logs, so it's simply off the porosity side
9 of the log?

10 A. Yes, just -- I guess it goes clear back to my
11 Texaco days, and this is an old log, you know, 1960
12 vintage. And 3 percent corrected for a dolomite reservoir,
13 we felt anything above -- you know, 3 percent and above was
14 net pay --

15 Q. Okay.

16 A. -- could produce hydrocarbons.

17 Q. So anything less than 3 percent is not accounted
18 for in this calculation?

19 A. That's correct.

20 Q. And what in your opinion is the potential range
21 of porosity that would be reasonable to use for that well?

22 A. Minimum to maximum?

23 Q. Yeah, if you can.

24 A. Three percent up to -- The log itself, I think
25 you have porosities up to 8 to 9 percent, as I recall.

1 Q. Right. Is the strategy for you to take the
2 footage that is above a certain point on the line of 3
3 percent and go through and individually add up and sum
4 those footages?

5 A. Yes, sir.

6 Q. That's what you did. So what did you pick for
7 the top and the bottom on the log to get you the 74 feet?

8 A. The top footage and the bottom footage?

9 Q. Yeah. Refer us to the exhibit number you're
10 using, and then give us the footages.

11 A. Okay. Obviously we have not marked on this log
12 what that figure would be. I did this on a separate
13 exhibit. My best recollection is that it is 49 -- 48 or 49
14 microseconds, would be your 3-percent cutoff in the
15 Devonian rock --

16 Q. Uh-huh.

17 A. -- and so anything above that was counted as pay.
18 Now, are you asking where did we first encounter some of
19 that in this well?

20 A. Yeah, the highest one and the lowest number, so I
21 can have my geologist or engineer do the same thing that
22 you're doing.

23 A. Well, it looks like at 11 -- I'm sorry, 14, 6, 5,
24 2 -- Boy, these things are hard to read. It's going to be
25 very close to -- Well, let's look at it this way. The base

1 of the Woodford is a clear break there. Ten feet below the
2 base of the Woodford, I believe, is where we started --
3 where I gave the first little bit of net pay. It wasn't
4 very porous, but it was above the cutoff, I believe.

5 Q. Okay. And you continue downward to what depth?

6 A. All the way to the gas-water contact.

7 Q. Which you have pegged at -- ?

8 A. Minus 11,340.

9 Q. Show me back on Exhibit 11 the basis for your
10 assumption of the S_w value. I think you've got 20 percent
11 for S_w .

12 A. That is pretty much a guess. You know, 1960-
13 vintage logs are not the best to work with. Again it's an
14 experience factor, Tom. You know, you say, Gosh, in a gas
15 -- what is basically a dry gas reservoir, typically the
16 saturation would be 15 to 25 percent.

17 Q. Down here under the calculation you've used a 90-
18 percent recovery factor.

19 A. Yes, sir.

20 Q. What's your basis for using that number?

21 A. Experience.

22 Q. Anything else?

23 A. No, I think that's good enough.

24 Q. Well, is there published literature on an
25 appropriate recovery rate to apply to a reservoir such as

1 this?

2 A. Is there published literature? Probably. But I
3 don't think any petroleum engineer would argue with a 90-
4 percent recovery, with these kind of pressures.

5 Q. This is a carbonate reservoir, right, with a
6 water drive?

7 A. Correct.

8 Q. Is the gas contained in the matrix of the
9 reservoir, or is there a fracture system in the reservoir?

10 A. There could be a fracture system. The logs, I
11 would argue that -- or I would observe that the porosity
12 log on this, a sonic log, often attenuates when you see
13 fractures, and you really don't see the kind of indications
14 of that on this log. So I would say this reservoir does
15 not appear to be highly fractured. I wouldn't question
16 that there might be some fracturing.

17 Q. Your end calculation is, you come up with 31 BCF
18 of gas, just a little over?

19 A. Well, of course that's what it actually did.

20 Q. We don't have to use P/Z or production decline,
21 because that's the actual number for the well?

22 A. Correct, and we could not use P/Z in this
23 efficient of a water drive reservoir anyhow.

24 Q. P/Z is not going to work because of the water
25 drive?

1 A. Correct.

2 Q. What do you think is the total volume of gas in
3 the container? Is it going to be just 10 percent more if
4 you use the 90-percent recovery?

5 A. Yes.

6 Q. When you're selecting out of this basis of
7 experience, is it reasonable to assume that the number
8 could be less than 90 percent?

9 A. Is it reasonable to assume?

10 Q. Yeah.

11 A. I guess I would not assume in this case that it
12 would be less, but I could certainly see where some other
13 engineer might say it's 85 percent or 80 percent. I don't
14 think anybody would realistically argue that it would be
15 less than 80 percent.

16 Q. The Z factor, is that a subjective judgment that
17 you've chosen as an engineer, or is that a hard number?

18 A. Well, it's a reasonably hard number. You have to
19 know the reservoir temperature, which I got from the log --
20 or from a drill stem test, I guess, I actually got that off
21 of one of the Amerada drill stem tests -- the bottomhole
22 temperature and the gas gravity, which on a dry gas should
23 be very close to 0.6.

24 So you go into tables and you've got super-
25 compressibility -- I'm sorry, you've got pseudo reduced

1 pressure, pseudo reduced temperature and all that good
2 stuff. And you go to a chart -- I'm an old-fashioned guy,
3 I don't have all that on the computer so I have to go to my
4 chart. And I say, Okay, I cross-plot, and there it is.
5 It's a -- that equates to 1.1

6 Q. Is there any opportunity for a reasonable
7 difference of opinion on the original pressure of the
8 reservoir? I think you've got 6400 pounds.

9 A. Well, I simply took it off two different drill
10 stem tests in that very wellbore that both reported 6400
11 pounds.

12 Q. So in your opinion that's a pretty good --

13 A. I would say so. It's very close to the .43-
14 p.s.i.-per-foot gradient that you would expect in a
15 Devonian reservoir. It's almost classic.

16 Q. Have you attempted to use similar assumptions and
17 run a calculation in Section 4 to see what the potential
18 gas in place is in Section 4, in the Devonian?

19 A. No.

20 Q. You've not done that?

21 A. Too much to speculate on. I mean, how much net
22 pay will we have, what will the porosity be? You simply
23 assume that you -- there's no reason -- I mean, every one
24 of these wells that's been drilled so far has had good,
25 very good quality porosity in the Devonian. I don't see

1 any reason to expect that we wouldn't have the same where
2 we plan to do the re-entry. So you just do it on analogue.

3 Q. Okay. The negotiation process has been long and
4 complicated, at least for me. And early on you said that
5 you have provided -- you recall providing this proposal to
6 Devon and included some of the geologic information to
7 support your proposal?

8 A. Yes, sir.

9 Q. In that submittal, did you submit to them
10 anything different than what we've seen today?

11 A. It's possible that the Devonian structure map
12 might be marginally different, but I would say very little.
13 I would say the Morrow structure map is virtually
14 identical. I would say that there is very little in that
15 brochure that is different from --

16 Q. Approximately when did you submit that to them?

17 A. May of 2001.

18 Q. Did you have conversations with Mr. Winchester
19 during the period of time you talked to him about
20 negotiations over this, where Mr. Winchester asked you to
21 give him your Devonian package and information, your
22 science?

23 A. No.

24 Q. You don't recall that he'd ever asked you that?

25 A. No. The only thing Richard ever asked me to

1 furnish when we made an issue of the First Roswell
2 acquisition and that we thought we ought to be entitled to
3 a portion of that, he said, Well, can you provide me with
4 some proof of that? And I chose not to at the time.

5 Q. When we come back to Exhibit 7, Mr. Landreth, and
6 we're looking how the geologist contoured the size and the
7 shape of the Devonian reservoir that's included within
8 Section 4 -- I said that wrong -- of which Section 4 is a
9 part --

10 A. Yes, sir.

11 Q. -- and I'm looking to the south --

12 A. Okay.

13 Q. -- and in Section 9 I'm looking for control
14 points for where he's put his structure.

15 In Section 9 I see in the northwest quarter
16 there's a well symbol, but it's not deep enough to give him
17 data, right?

18 A. But it is a Morrow penetration. All of these
19 things -- Virtually every well that says not deep enough is
20 a Morrow penetration. And therefore you go back to the
21 fact that the Morrow very closely mirrors the Devonian,
22 which allows you to do an interval map and take this to
23 depth, to the Devonian.

24 Q. Do you have a copy of your geologist's Morrow
25 structure map so that we can compare the Morrow map to the

1 Devonian map that he's prepared?

2 A. Yes.

3 Q. Is that one of the exhibits?

4 A. It's Exhibit 6, I think.

5 Q. So it's your testimony, then, that the Morrow

6 data can be used to infer structural position in the

7 Devonian?

8 A. Yes.

9 Q. And that's what's happened here. So when I'm
10 looking for control points to the south and to the east of
11 Section 4, I have to go back up and look at the Morrow
12 wells to see if I agree?

13 A. That's correct.

14 Q. Okay. What was the source of the 2-D seismic
15 data? Where did that come from?

16 A. One line was purchased from Texaco through a
17 broker, and the other was purchased from a company called
18 PGI, I believe.

19 Q. Do you know if there's more than these two lines
20 in this area?

21 A. I'm thinking that PGI might have had lines like
22 every section. I'm pretty hazy on that.

23 Q. So you only acquired two lines?

24 A. Yes.

25 Q. Out of the possible inventory of 2-D seismic

1 lines, why did you select these two? Or did you have a
2 choice to select from?

3 A. We didn't have a choice when we considered what
4 it was we were trying to evaluate. Those two lines were
5 obviously the key lines.

6 MR. KELLAHIN: Okay. May I have a second to
7 check with the man that pays me to do this?

8 EXAMINER BROOKS: Yes, you may.

9 THE WITNESS: Could I get a drink at the
10 fountain?

11 EXAMINER BROOKS: You may.

12 (Off the record)

13 MR. KELLAHIN: Thank you, Mr. Landreth. That
14 concludes my cross, Mr. Examiner.

15 EXAMINER BROOKS: Redirect, Mr. Hall?

16 MR. HALL: Briefly, Mr. Examiner.

17 REDIRECT EXAMINATION

18 BY MR. HALL:

19 Q. Mr. Landreth, Mr. Kellahin seemed to suggest that
20 one indicia of potential separation in Section 5 would be
21 the fact that we're seeing that water column in the Amerada
22 North Bell Lake Federal Well Number 2 there. Do you recall
23 him asking you about that?

24 A. I missed a few words in what you said. You used
25 a -- Would you rephrase the question?

1 Q. Mr. Kellahin suggests that one possible scenario
2 for establishing separation in Section 5 is the fact you're
3 looking at a water column in the Amerada Hess well there in
4 Section 5. Do you remember him asking you about that?

5 A. Yes.

6 Q. On your Exhibit 7, of course, your fault line is
7 not drawn in the same location as Devon's, is it? In fact,
8 Devon's line is drawn in closer proximity to that Amerada
9 well; isn't that right?

10 A. Yes.

11 Q. Is that a possible explanation for why you might
12 see that water column in that well, since water's coming up
13 through the hole?

14 A. I guess it's possible.

15 MR. HALL: Nothing further, Mr. Examiner.

16 EXAMINATION

17 BY EXAMINER BROOKS:

18 Q. Okay. Well, essentially that was the same
19 question that I was going to ask, is, how do you explain
20 the wet test in the North Bell Lake Federal Number 2, when
21 it's only slightly lower than the Number 1 and the
22 Continental well?

23 A. Well, my feeling is that in the Continental well,
24 by 1995 when those two Amerada wells were drilled --

25 Q. Right.

1 A. -- 35 years into the productive life of the
2 Conoco well, that Conoco well -- I don't -- you know, we
3 can go back and look. I'll bet it's already made 28 of the
4 31 BCF that it's ultimately going to make. In fact, I'll
5 bet it's made more than that.

6 And so my feeling is that it has pulled the water
7 level almost to the top of the Devonian. That's pretty
8 well documented by the curve, the production curve, that
9 shows that late in the life of that well it was making only
10 800 MCF a day and 700 barrels of water a day.

11 So the Conoco well has produced the gas that once
12 was under the Amerada Number 2 well.

13 Q. And then according to your interpretation, when
14 you get the fault that -- once it got to the bottom of the
15 overlying strata, once the water got to the bottom of the
16 overlying strata and that fault then it didn't go up any
17 higher on the east side?

18 A. On the easterly portion.

19 Q. So that's the basis on which you've drawn this
20 green line?

21 A. Yes, sir.

22 EXAMINER BROOKS: Okay, I don't think I have
23 anything further.

24 Mr. Catanach?

25 EXAMINER CATANACH: Just one.

EXAMINATION

1
2 BY EXAMINER CATANACH:

3 Q. Mr. Landreth, the proposed re-entry, is there a
4 chance that that well would drain less than 640 acres?

5 A. From our geology and from Devon's geology, I
6 would say there is hardly a chance. I would say there's
7 every chance that well would drain all the gas on that side
8 of the reservoir, just as the Conoco well did on the west
9 side of the reservoir.

10 Q. And that's just based upon the analogy to the
11 Conoco well to the west?

12 A. And if you look at the structural position of the
13 re-entry, of that location, it's very close to the crestal
14 position of the structure. I mean, it ought to be a highly
15 efficient recovery at that location.

16 EXAMINER CATANACH: Okay, I have nothing further.

17 EXAMINER BROOKS: Anything in follow-up?

18 MR. KELLAHIN: No, sir.

19 EXAMINER BROOKS: Very good, the witness may
20 stand down.

21 MR. HALL: Shall we plow ahead?

22 EXAMINER BROOKS: Well, how long do you expect
23 your next witness to be?

24 MR. HALL: We'll be out of here before 5:00, on
25 direct and cross.

1 EXAMINER BROOKS: Well, it's been a fairly long
2 session. Maybe we ought to take a five-minute recess.

3 MR. HALL: Okay.

4 (Thereupon, a recess was taken at 4:11 p.m.)

5 (The following proceedings had at 4:16 p.m.)

6 EXAMINER BROOKS: Are we ready to proceed?

7 MR. HALL: Yes, sir.

8 EXAMINER BROOKS: You may proceed, Mr. Hall.

9 MR. HALL: At this time, Mr. Examiner, we would
10 call James Brezina to the stand.

11 JAMES BREZINA,

12 the witness herein, after having been first duly sworn upon
13 his oath, was examined and testified as follows:

14 DIRECT EXAMINATION

15 BY MR. HALL:

16 Q. For the record, please state your name, sir.

17 A. My name is James Brezina.

18 Q. Mr. Brezina, where do you live and how are you
19 employed?

20 A. I live in Midland, Texas, and I'm self-employed.

21 Q. Who do you work for and in what capacity?

22 A. Well, I work as an independent geologist and a
23 consulting geologist. I'm here in association with EGL
24 Resources. We're partners, and because I have an interest
25 in this prospect.

1 Q. All right. You're familiar with EGL's
2 Application in this case?

3 A. Yes, I am.

4 Q. And you're familiar with the lands that are the
5 subject of this Application?

6 A. Yes, I am.

7 Q. And you're also familiar with Devon's Application
8 and the well proposals that have gone back and forth --

9 A. Yes, I am.

10 Q. -- in this prospect?

11 You've previously testified before the Division
12 and had your credentials as a petroleum geologist
13 established and accepted as a matter of record; is that
14 correct?

15 A. Yes, I have.

16 MR. HALL: Mr. Examiner, are the witness's
17 credentials acceptable?

18 EXAMINER BROOKS: He is qualified.

19 MR. HALL: All right.

20 EXAMINER BROOKS: I'm sorry, Mr. Kellahin?

21 MR. KELLAHIN: No objection.

22 EXAMINER BROOKS: Okay. Yes, he's so qualified.

23 Q. (By Mr. Hall) All right. Mr. Brezina, in view
24 of the fact that you're a geologist we had planned to have
25 you render some rather comprehensive, I hope, geologic

1 testimony, but in view of the hour I think we can shorten
2 that quite a bit.

3 You sat through Mr. Landreth's testimony, and
4 you've heard him testify about his conclusions with respect
5 to the geology out there, and you've seen his geologic
6 exhibits. Do you agree with Mr. Landreth's conclusions on
7 the geology of the Devonian-Morrow formations in this area?

8 A. Yes, I do.

9 Q. Let me ask you some questions that will place
10 this dispute in a better historical context, if I could.
11 What was it that first triggered EGL's interest in this
12 area?

13 A. It was -- I presented this prospect out here
14 because I was -- the reason I went to EGL was, I needed an
15 operator to move forward on this. And so I presented EGL
16 with this geologic idea soon after the Rio Blanco well was
17 drilled where we had a known geological point.

18 But really my data with this prospect was back in
19 1991. At the time I was a consulting geologist on a
20 retainer for Pacific Enterprises, and at that time I
21 developed this prospect out here. And in fact we came to
22 the Commission in the spring of 1991 and submitted
23 geological engineering exhibits on a force pooling hearing
24 with the intention of drilling a Devonian test back in
25 1991.

1 So my work in this area goes back to 1991,
2 although of record you can look, I have an override
3 assignment back to that date, as of record too.

4 Q. All right. So you've been looking at the geology
5 in this area, including Section 5, as far back as the early
6 1990s; is that accurate?

7 A. That's correct.

8 Q. And when in your association with EGL did you
9 first make EGL aware of the possibilities out here?

10 A. Like I said, shortly after that Rio Blanco well
11 was drilled, when the well log was released. It had a --
12 What it did is confirmed some of my geology, because if you
13 look at all these exhibits out here -- excuse me,
14 especially the exhibits submitted by us, the top of that
15 Morrow was about 30, 40 feet high to the Continental well
16 back in Section 6, and they just essentially confirmed that
17 they had a very anomalous area, based on geology and based
18 on well control.

19 Q. And the Continental well was drilled when? 1998;
20 is that correct?

21 A. The Continental well, back in the 1960s. Are you
22 talking about the --

23 Q. I'm sorry, I'm confusing you.

24 A. Okay.

25 Q. Which well are we talking about, when was it

1 drilled? I need to put a time context --

2 A. Okay, the Rio Blanco Federal Number 4, I think,
3 was drilled, if I'm not mistaken, 1998.

4 Q. All right. And so it's about that point in time,
5 1998, is when you took this prospect to EGL?

6 A. Well, maybe shortly afterwards, you know, when
7 the log was released. It could have been in early 1999.

8 Q. Okay. Now, when did EGL first commit to
9 developing Section 4?

10 A. Well, they saw my geology and they were ready to
11 go after it. And so we tried to acquire a leasehold
12 interest in there, and we determined Hunt was our best
13 objective to go after. And after negotiating with them, we
14 were able to -- EGL and others, buy their interest out.

15 Q. All right, and what date was that, if you recall?

16 A. I don't recall. You'd have to look at some of
17 the exhibits.

18 Q. If we can look at the chronology exhibit, Exhibit
19 2, if you have that in front of you, you could refer to the
20 entry for --

21 A. I don't have it in front of me, but --

22 Q. -- March 1, 2001.

23 A. Okay, March 1, 2001. Okay.

24 Q. Does that indicate to you that that's when EGL
25 acquired its lease interest out there?

1 A. Yes, it does.

2 Q. That's the Hunt lease interest? Sir?

3 A. Yes.

4 Q. And when did EGL, EGL itself, first propose this
5 re-entry procedure to the other working interest owners in
6 Section 5 -- I'm sorry, Section 4?

7 A. Well, Section 4 was that letter that was dated --
8 you know, we discussed earlier, that EGL sent out a letter
9 and an AFE.

10 Q. Is that the March 15, 2002, letter?

11 A. Yes, it is.

12 Q. And that proposal was preceded by Mr. Landreth's
13 letter; is that correct?

14 A. Yes.

15 Q. Now, talk to you briefly again. Before your
16 association with EGL, I understand you to say you were
17 associated with Pacific Enterprises; is that correct?

18 A. That's correct.

19 Q. And you participated in the compulsory pooling
20 proceeding in 1991, also affecting Section 4; is that
21 right?

22 A. That is correct.

23 Q. And did you appear here and render testimony in
24 that case?

25 A. Yes, I did.

1 Q. Did you help in the preparation of exhibits in
2 that case?

3 A. Yes, I did.

4 Q. And did your testimony and those exhibits help
5 establish that 640-acre spacing was appropriate for this
6 well?

7 A. Yes, I did.

8 Q. And did you conclude and did the Hearing Examiner
9 and Division Director agree that the pool rules for the
10 North Bell Lake-Devonian Gas Pool ought to apply to Section
11 4?

12 A. Yes.

13 MR. HALL: That concludes my direct of this
14 witness, Mr. Examiner.

15 EXAMINER BROOKS: Mr. Kellahin?

16 CROSS-EXAMINATION

17 BY MR. KELLAHIN:

18 Q. Mr. Brezina, when you presented this case for
19 Pacific, for Section 4 for the force pooling, was that case
20 opposed by anyone?

21 A. We force-pooled Exxon, but my memory -- going
22 back 12 years, I don't remember it precisely. I don't
23 think so, but I would hate to...

24 Q. So it was not an opposed case, as best you
25 recall?

1 A. That's correct.

2 Q. The transcript, which the Examiner's already
3 taken under advisement, or administrative notice of, will
4 reflect if there was opposition?

5 A. Yes.

6 Q. Did you utilize in this process any 3-D seismic
7 data?

8 A. No, I didn't.

9 Q. You did not have any?

10 A. No, not back then.

11 Q. Do you have any now?

12 A. No, sir.

13 Q. When you were looking at this, did you have any
14 2-D seismic data?

15 A. I didn't, but Pacific Enterprises did.

16 Q. Was there a geophysicist involved with Pacific
17 Enterprises?

18 A. Yes, there was.

19 Q. Do you know if his seismic lines were any
20 different than what Mr. Landreth has indicated to be the
21 seismic lines he's utilized?

22 A. I think there were some more lines, to the best
23 of my recollection, more than two. I think there was
24 several more.

25 MR. KELLAHIN: I have no further questions.

1 EXAMINER BROOKS: I guess I have no further
2 questions either.

3 MR. HALL: That concludes our case, Mr. Examiner.

4 EXAMINER BROOKS: Very good, the witness may
5 stand down.

6 Do the parties want to present concluding
7 arguments?

8 MR. KELLAHIN: I have some housekeeping here.

9 EXAMINER BROOKS: Okay.

10 MR. KELLAHIN: Did you admit 14, Scott?

11 MR. HALL: I did.

12 MR. KELLAHIN: Okay. I neglected to make copies
13 of my certificate of notice for this hearing.

14 EXAMINER BROOKS: Okay.

15 MR. KELLAHIN: Both those parties are here.
16 They're the only people we notified. So with your
17 permission, I'd like to introduce what I've marked as
18 Exhibit F, which is the certificate.

19 MR. HALL: No objection.

20 EXAMINER BROOKS: Exhibit F is admitted. I think
21 any failure of notice is waived.

22 MR. KELLAHIN: I would like to suggest, Mr.
23 Examiner, that you give us a chance to submit you a draft
24 order, and we'll make a short written closing statement to
25 you.

1 EXAMINER BROOKS: Whatever is your pleasure. I
 2 did have a question, really, to address to Mr. Hall,
 3 because I think it's more appropriate for the lawyer than
 4 for the expert witnesses.

5 Is EGL seeking to be appointed operator, even if
 6 we were to conclude that the 320-acre spacing is required
 7 by the applicable rules?

8 MR. HALL: That's correct, sir.

9 EXAMINER BROOKS: Okay. So you're seeking
 10 operation in any case?

11 MR. HALL: Yes.

12 EXAMINER BROOKS: I guess that's all I have.
 13 I assume you will submit written arguments.

14 MR. KELLAHIN: Thank you.

15 EXAMINER BROOKS: We'll stand adjourned.

16 MR. HALL: Thank you.

17 (Thereupon, these proceedings were concluded at
 18 4:28 p.m.)

19 * * *

20
 21 I do hereby certify that the foregoing is
 22 a complete record of the proceedings in
 23 the Examiner hearing of Case No. _____
 heard by me on _____ 19____

24 _____, Examiner
 25 Oil Conservation Division

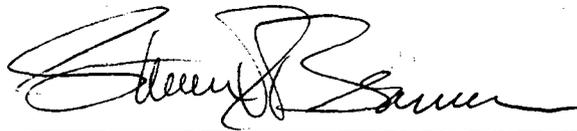
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
 COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL April 14th, 2003.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 16th, 2006