

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 ENRON OIL AND GAS COMPANY)
FOR COMPULSORY POOLING, EDDY COUNTY, NEW)
MEXICO)

CASE NO. 11,540

ORIGINAL

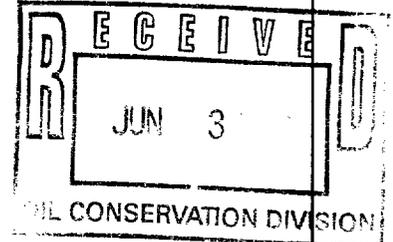
REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

May 30th, 1996

Santa Fe, New Mexico



This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, May 30th, 1996, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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May 30th, 1996
 Examiner Hearing
 CASE NO. 11,540

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A P P E A R A N C E S

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* * *

1 WHEREUPON, the following proceedings were had at
2 8:22 a.m.:

3 EXAMINER STOGNER: I will now call Case Number
4 11,540.

5 MR. CARROLL: Application of Enron Oil and Gas
6 Company for compulsory pooling, Eddy County, New Mexico.

7 EXAMINER STOGNER: Call for appearances.

8 MR. OWEN: Paul Owen with the Campbell law firm
9 in Santa Fe, for Enron.

10 MR. BRUCE: Mr. Examiner, Jim Bruce of the Hinkle
11 law firm in Santa Fe, representing Mewbourne Oil Company.
12 I have no witnesses.

13 EXAMINER STOGNER: Any other appearances?

14 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
15 the Santa Fe law firm of Kellahin and Kellahin, appearing
16 on behalf of Marathon Oil Company.

17 EXAMINER STOGNER: Mr. Kellahin, do you have any
18 witnesses?

19 MR. KELLAHIN: No, sir.

20 EXAMINER STOGNER: Any other appearances?
21 How many witnesses do you have?

22 MR. OWEN: I have two witnesses.

23 EXAMINER STOGNER: Will the two witnesses please
24 stand and be sworn at this time?

25 (Thereupon, the witnesses were sworn.)

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PATRICK J. TOWER,

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

DIRECT EXAMINATION

BY MR. OWEN:

Q. Please state your full name and place of residence.

A. My name is Patrick J. Tower. My place of residence is Midland, Texas.

Q. By whom are you employed?

A. Enron Oil and Gas Company.

Q. What do you do for Enron?

A. I'm a petroleum landman.

Q. Have you previously testified before the Division?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as a petroleum landman accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Enron?

A. Yes, I am.

Q. Are you familiar with the status of the lands in the subject area?

1 A. Yes, I am.

2 MR. OWEN: Mr. Examiner, are the witness's
3 qualifications acceptable?

4 EXAMINER STOGNER: Any objections?

5 MR. BRUCE: No.

6 EXAMINER STOGNER: There being none, the witness
7 is so qualified.

8 Q. (By Mr. Owen) Mr. Tower, would you please
9 briefly state what Enron seeks with this Application?

10 A. Yes, Enron is seeking an order pooling all
11 mineral interests -- or all minerals from 5000 feet to the
12 base of the Morrow formation underlying the south half of
13 Section 5, Township 18 South, Range 28 East, in Eddy
14 County, New Mexico, with the south half forming a standard
15 320-acre proration unit for all formations in the pools
16 developed on the 320-acre spacing, for the southeast
17 quarter forming a standard 160-acre spacing and proration
18 unit for all formations or pools developed on 160-acre
19 spacing, the south half of the southeast quarter forming a
20 standard 80-acre spacing and proration unit for all
21 formations or pools developed on 80-acre spacing, and the
22 southwest quarter of the southeast quarter forming a
23 standard 40-acre spacing and proration unit for all
24 formations and pools developed on 40 acres, the pooled unit
25 to be dedicated to Enron's proposed Empire 5 State Com

1 Number 1 well, which will be drilled at a standard location
2 807 feet from the south line and 1992 feet from the east
3 line of the Section 5, within the North Illinois Camp-
4 Morrow Gas Pool.

5 Q. All right, Mr. Tower, let's go to what is marked
6 as Enron's Exhibit Number 1. It's a land map. Could you
7 please review the land map for the Examiner?

8 A. Yes, this is a plat off the Midland map depicting
9 the lands in question. Outlined in red is the 320-acre
10 tract mentioned for this well, with the pink dot
11 representing the location for the proposed Morrow test, and
12 then identifying the leasehold and wells surrounding this
13 property.

14 Q. What's the primary objective of the proposed
15 well?

16 A. Again, it's the Morrow formation in the North
17 Illinois Camp-Morrow Gas Pool.

18 Q. All right, Mr. Tower, let's go to Enron Exhibit
19 Number 2. Would you please identify and review that
20 exhibit?

21 A. Exhibit Number 2 is a copy of the operating
22 agreement, Exhibit A, that was sent to all the parties
23 involved. This depicts the ownership of the parties that
24 have a working interest in this proposed 320-acre Morrow
25 test.

1 In addition, I will point out, too, there are two
2 additional parties that are not listed here, that likely do
3 not have any title, however there is a title question. We
4 have talked to those parties, those two being Meridian
5 and -- I believe the other is Oryx. However, we did not
6 list them. We did notify them in the process, though.

7 Q. Could that have been ARCO?

8 A. Oh, in addition, in addition, one additional
9 party is ARCO Permian, and they come in under a private
10 agreement with Amoco which we're not privy to. So the
11 Amoco Production Company interests may be shared, is our
12 understanding, however there's no legal title or anything
13 putting title into them, other than Amoco advised us they
14 may be a partner, and we have discussed it with ARCO and
15 given them proper notice too.

16 Q. What percentage of the ownership in this acreage
17 have you been able to get voluntarily committed to the
18 well?

19 A. Currently Enron has 37.5 percent working
20 interest. We do have additional commitments where --
21 however, the agreements have not been reached and they're
22 still subject to final negotiations at which time those
23 parties will be dismissed. However, we anticipate that
24 Enron's final working interest will approximate 50 percent.

25 Q. All right, Mr. Tower, let's go to Enron Exhibit

1 Number 3, your AFE. Would you please review the totals for
2 the Examiner?

3 A. Yes, this is a cost estimate for a 10,550-foot
4 Morrow test as we've discussed. And as you'll note, the
5 dryhole estimate is \$414,500, with the total well completed
6 cost estimated to be \$751,000.

7 Q. Are these costs in line with the costs charged by
8 other operators in the area for similar wells?

9 A. Yes, they are.

10 Q. Has Enron drilled other Morrow wells in this
11 area?

12 A. Yes, we have.

13 Q. Are these AFE costs in line with the costs
14 incurred by Enron --

15 A. Yes.

16 Q. -- in drilling those wells?

17 A. Yes, they are.

18 Q. What efforts have you made to obtain voluntary
19 joinder of all working interest owners and mineral interest
20 owners in the proposed spacing units?

21 A. If you'll refer to Exhibit Number 4, it is a --
22 several letters among the various parties. In addition to
23 this, there have been numerous verbal conversations with
24 all the parties involved.

25 However, if you'll look at Exhibit 4, the

1 original well proposal to the parties involved was sent to
2 the parties on February 8th, 1996. Subsequent to that,
3 there's a letter of April 11th, where the operating
4 agreement was sent also. We amended the well location due
5 to a shallow well being located at the spot we initially
6 picked, so we had to move it slightly, and we advised the
7 parties.

8 Subsequent to that, you'll see a letter dated
9 March 12th from Phillips Petroleum Company. The majority
10 of the parties' interest outside of Enron is derived
11 through a contractual working interest joint operating
12 agreement that covers 200 of the 320 acres in our spacing
13 unit, of which Phillips was the designated operator. They
14 have supported Enron in trying to put together a new joint
15 operating agreement, and they also sent notice to the
16 parties towards this end.

17 In addition, again, there have been -- without
18 itemizing all the 20-some owners, there have -- I can
19 testify, direct conversations with every single one, and
20 numerous times, discussing the seeking of voluntary
21 joinder.

22 Q. Mr. Tower, the first letter in Exhibit Number 4,
23 the February 8th letter, was that sent to every interest
24 owner that's reflected on Exhibit Number 2?

25 A. Yes.

1 Q. And have you attempted to obtain voluntary
2 joinder from every interest owner that's reflected on
3 Exhibit Number 2?

4 A. Yes, we have. One thing I will point out in the
5 February 8th letter, it's a very complicated title, and
6 there's additional parties listed in the February 8th
7 letter that, as it turned out, have no ownership in the
8 south half. There was some questions as to their
9 assignments and their interests.

10 So a lot of the parties -- we sent extra notice
11 to parties who really are not involved, and subsequent to
12 that received title information to confirm that a lot of
13 these people have no current title.

14 Q. In your opinion, has Enron made a good-faith
15 effort to locate and obtain voluntary joinder of all
16 interest owners in the proposed spacing units?

17 A. Yes, we have.

18 Q. Have you made an estimate of the overhead and
19 administrative costs to be incurred while drilling the well
20 and also while producing the well if it is successful?

21 A. Yes, we have, and those estimates would provide
22 for a drilling well rate of \$5800 and a producing well rate
23 of \$580.

24 Q. That's per month?

25 A. Per month, yes.

1 Q. Are these costs in line with the *Ernst and Young*
2 1995 survey?

3 A. Yes, they are.

4 Q. Are these costs in line with what is being
5 charged by other operators in this area?

6 A. Yes.

7 Q. Do you recommend that these figures be
8 incorporated into the order which results from this
9 hearing?

10 A. Yes, I do.

11 Q. All right, Mr. Tower, let's go to Enron Exhibit
12 Number 5. It's an affidavit with attached letters
13 confirming that notice of this Application has been
14 provided in accordance with OCD rules. Are you familiar
15 with that exhibit?

16 A. Yes, I am.

17 Q. Was notice sent to every record interest owner?

18 A. Yes, it was.

19 Q. Will Enron call a technical witness to testify
20 about the risk associated with the proposed well?

21 A. Yes, we will.

22 Q. Were Enron Exhibits Numbers 1 through 5 prepared
23 by you or compiled under your direction?

24 A. Yes, they were.

25 MR. OWEN: Mr. Examiner, I tender Exhibits 1

1 through 5.

2 EXAMINER STOGNER: Any objections?

3 MR. KELLAHIN: No, sir.

4 EXAMINER STOGNER: Exhibits 1 through 5 will be
5 admitted into evidence.

6 MR. OWEN: Thank you, Mr. Tower.

7 EXAMINER STOGNER: Mr. Bruce, your witness.

8 MR. BRUCE: No questions.

9 EXAMINER STOGNER: Mr. Kellahin?

10 MR. KELLAHIN: Just a couple points of
11 clarification, Mr. Examiner.

12 EXAMINATION

13 BY MR. KELLAHIN:

14 Q. Mr. Tower, if you would turn to Exhibit Number 1
15 with me, when we look at the south half of Section 5, it
16 appears on this plat to be subdivided, the various tracts?

17 A. Yes.

18 Q. The 37.5 percent Enron interest --

19 A. Yes.

20 Q. -- is that specifically derived from a certain
21 lease within the spacing unit area, or is it spread over
22 the entire 320 acres?

23 A. It is derived from a specific lease which covers
24 the south half of the southeast quarter, as well as the
25 northwest quarter of the southwest quarter. That

1 particular 120 acres is owned 100 percent by Enron. The
2 remaining 200 acres is the contractual or the working
3 interest contract among these other parties. And then
4 spread over the 320-acre new contract area under this joint
5 operating agreement of which Exhibit A was attached, is how
6 we derived the 37.5-percent working interest.

7 Q. So when I look At Exhibit 2 --

8 A. Yes.

9 Q. -- paragraph 3, where you've itemized all the
10 working interest owners from Phillips on down, those are
11 the interest owners within the 200-acre tract?

12 A. No, these are the interests over the 320-acre
13 spacing unit. These are the proportionately reduced
14 interests on the 320-acre basis.

15 Q. As to those companies and entities, though, they
16 derive their interests out of the 200 acres?

17 A. Yes -- Say that again. I'm not sure I
18 understand.

19 Q. The list of companies --

20 A. Yes.

21 Q. -- individuals, they have no interests in your
22 120-acre tract?

23 A. That is correct.

24 Q. And so their interest is derived out of the 200-
25 acre tract?

1 A. This is correct.

2 Q. And the percentage, then, is calculated in terms
3 of their share of the 320-acre spacing unit?

4 A. That is correct.

5 Q. Do you have any of these individuals or companies
6 that have currently voluntarily committed to the well?

7 A. We have several. That's a good point of
8 clarification. Going down, at this point that have signed
9 all the agreements and fully committed, of course Enron.
10 Let's see, Ken Perkins Oil and Gas, Inc.; Vilas P. Sheldon
11 Trust; Read and Stevens, Incorporated. And that's all.

12 Q. All right.

13 A. There are several that we anticipate will and
14 will be dismissed if they actually do, however none of the
15 agreements are in place.

16 Q. As of today, though, the companies you've just
17 mentioned are the only ones that are fully committed and
18 could be dropped from the pooling?

19 A. That is correct, that's a good point of
20 clarification.

21 MR. KELLAHIN: Thank you, Mr. Tower.

22 EXAMINER STOGNER: Thank you, Mr. Kellahin.

23 EXAMINATION

24 BY EXAMINER STOGNER:

25 Q. Mr. Tower, again, what was the 120 acres

1 identified by you that Enron has?

2 A. It is the south half of the southeast quarter,
3 that particular 80-acre tract, as well as the northwest
4 quarter of the southwest quarter.

5 Q. Now, the percentage that you've shown for the
6 others are -- Let's go back to that. On Exhibit Number 2,
7 Paragraph 3, the percentages shown are the percentages in
8 the 320 acres; is that correct?

9 A. That is correct.

10 Q. Now, would that percentage be different and
11 varied for the other proration units in which you were
12 proposing to establish?

13 A. Yes, it would. We didn't itemize them here,
14 however, the well-site location is on the Enron tract.

15 The remaining -- If you were to reduce it to 160
16 acres, the actual record title or -- or the contractual
17 working interest in the other 80, the north half of the
18 southeast quarter, is derived by the contractual working
19 interest owner besides Enron, as well as at one particular
20 depth -- I believe it's 5000 to approximately 8500 -- two
21 of these individuals own -- Marathon and OXY -- or
22 Marathon, excuse me -- will own 100 percent in a certain
23 depth interval.

24 But we've simply -- It involves all the parties
25 here. We've just simply done it on 320 to simplify it.

1 But all the same parties will be involved to some extent.

2 Q. Regardless of what size the proration unit is?

3 A. With the exception -- If we did end up with a 40-
4 acre -- that's a good point of clarification -- it would be
5 strictly Enron 100 percent.

6 So at that point I guess in this effort, now,
7 that we're looking at it, it may not be needed for the 40
8 acres. Everything else would involve this group that we're
9 dealing with here.

10 Q. Okay, how about the 80 acres?

11 A. Eighty acres, depending on -- Excuse me, it would
12 be the same thing, I'm sorry, the 40 and the 80 acres.

13 Q. So that's --

14 A. That would be Enron 100 percent at this point.

15 What we did -- and I apologize to the
16 Commission -- we went in anticipating this joint operating
17 and a spreading on a 320 basis, which is likely what will
18 happen with the final outcome of this well, where everybody
19 will be spread per the contract, if it eventually gets put
20 in place.

21 However, for the pooling, the 40 and 80 would
22 fall strictly on Enron as far as the pooling application.

23 Q. Okay. Now, you're seeking to force-pool all
24 mineral interests on a depth of 5000 feet to the base of
25 the Morrow formation.

1 Is that 5000 feet tied in with other agreements
2 that exist?

3 A. The -- At this point, no. The agreement that's
4 in place with these other parties starts at the base of the
5 Abo down through the Morrow.

6 And as set out in item number 2 of that Exhibit
7 Number 2, the depth from 5000 to this top of the Abo is
8 under no such contract, and that is primarily Marathon's
9 interest as to that depth interval.

10 However, none of these parties are in a contract
11 that I've named in the force pooling with Enron. This was
12 a separate contract among those particular parties.

13 Q. But that led -- that agreement that you had
14 discussed led to the -- How would you say? The
15 constriction of the force pooling, as opposed to being from
16 the surface down --

17 A. Yes --

18 Q. -- to the base of the Morrow?

19 A. -- that is correct.

20 EXAMINER STOGNER: Okay. Any other questions of
21 this witness?

22 MR. OWEN: Not at this time, Mr. Examiner.

23 EXAMINER STOGNER: You may be excused. Thank
24 you, Mr. Tower.

25 MR. OWEN: Mr. Examiner, I call Mr. Barry Zinz.

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BARRY L. ZINZ,

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

DIRECT EXAMINATION

BY MR. OWEN:

Q. Please state your name and place of residence for the record.

A. Barry L. Zinz --

Q. And --

A. -- Midland, Texas.

Q. And by whom are you employed?

A. Enron Oil and Gas.

Q. And what do you do for Enron?

A. A geologist.

Q. Have you previously testified before this Division?

A. I have.

Q. At the time of that testimony, were your credentials as a petroleum geologist accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Enron?

A. I am.

Q. Have you made a geologic study of the area

1 surrounding the proposed well?

2 A. I have.

3 Q. Are you prepared to share the results of that
4 study with the Examiner?

5 A. Yes, sir.

6 MR. OWEN: Mr. Examiner, are the witness's
7 qualifications acceptable?

8 EXAMINER STOGNER: Are there any objections?

9 MR. BRUCE: No objection.

10 EXAMINER STOGNER: Mr. Zinz is so qualified.

11 Q. (By Mr. Owen) Mr. Zinz, have you prepared
12 exhibits for presentation in this case?

13 A. I sure have.

14 Q. Let's go to Enron Exhibit Number 6. Could you
15 identify and review that for the Examiner?

16 A. That's a stratigraphic cross-section that I put
17 together which traverses the Section 5, the south half of
18 it that we're going to be drilling our proposed Morrow well
19 in.

20 I might also say -- Maybe we could go on to
21 Exhibit 7 as well. That shows the line of cross-section.

22 But if you'll refer to the cross-section, this
23 represents the Morrow formation which we're drilling to.
24 I've broken the Morrow formation out into what I've called
25 the middle Morrow sands, then there are the lower Morrow

1 sands, which have also been subdivided.

2 The lower Morrow has two facies that I've
3 identified. The upper facies within the lower Morrow is
4 what I call the braided channel facies, and the remaining
5 part of the lower Morrow there is what I refer to as the
6 channel facies.

7 I believe these middle Morrow sands are near-
8 shore-type barrier systems, barrier bars, that are
9 influenced by marine deposition, and the lower Morrow is
10 more fluvial type deposition, with regard to the way they
11 were laid down.

12 The structure map, which is Exhibit 7, simply
13 shows regional southeast dip through the area. Structure
14 within the area that we're going to be drilling really
15 doesn't play that much of a part.

16 To the south and southeast some of the wells
17 calculate wet on the electric logs, but in our area the
18 structure doesn't seem to be a problem where we're going to
19 be drilling.

20 On the structure map, the south-half proration
21 unit of Section 5 is outlined in red. Our proposed
22 location is indicated by the open circle within the south
23 half there.

24 Q. All right. Let's go to Enron Exhibit Number 8.
25 Would you please review that for the Examiner?

1 A. Exhibit Number 8 is a cum Morrow production map.
2 This is really the key map for the area. If you look at
3 this map, it's color-coded. The purple production
4 represents the middle Morrow bar facies. The green
5 represents the lower Morrow braided-channel facies. And
6 the red production by the wells indicate the lower Morrow
7 channel facies.

8 If you look here, there's only really two wells
9 within the mapped area, the well up in Section 29 that has
10 made 34 BCF and 301,000 barrels of oil, plus a well down in
11 Section 7 to the southwest part of the map there, which has
12 cum'd 2.8 BCF. Those two wells right there are really the
13 only wells in the area that meet risked economics.

14 And a lot of these wells you see here, these cums
15 represent their EURs, because they've been plugged.

16 Q. Where is the production from the two economically
17 viable wells that are indicated?

18 A. They're out of the lower Morrow, and the red
19 production, that lower channel facies, is what everybody
20 drills for out here. That's what the incentive is.

21 Q. Let's go to Enron Exhibit Number 9. It's an
22 isopach of the middle Morrow. Could you please review that
23 for the Examiner?

24 A. You bet, this is the middle Morrow bar facies.
25 Its trend, the way I've interpreted it, is northeast to

1 southwest. And like I say, it's these barrier-type bars
2 that were laid down in that type of depositional
3 environment.

4 And you can see, if you refer back to the
5 production map, that there's only one well within the area
6 there that was productive out of that particular facies,
7 and it's that 107 million up there in Section 30; that's
8 what it's cum'd. And that well has been plugged out.

9 This particular facies, I might add, even if
10 you're lucky enough to find the sand, as you can see the
11 way I've mapped it here, some of the wells are fairly thick
12 from a net-sand standpoint, the porosities and
13 permeabilities in this particular interval are not good,
14 they're very erratic, which results in a poor reservoir
15 quality.

16 Q. All right, let's go to Enron Exhibit Number 10,
17 another isopach. Could you please review that for the
18 Examiner?

19 A. This isopach map, again, is the lower Morrow
20 channel facies -- or, excuse me, the lower Morrow braided
21 facies -- and it trends more or less northwest-to-southeast
22 across the area.

23 And again, if you'd refer back to the production
24 map, you can see that there's a lot more green production
25 on the map. And these wells tap this particular reservoir,

1 and the production in the area is more frequent from that
2 particular interval.

3 Again, the risked economics cannot support most
4 of this production from this zone, however.

5 Q. All right, then does Enron Exhibit Number 11 show
6 an isopach of the channel facies?

7 A. It's actually not an isopach of the channel
8 facies. What this isopach map represents is a total gross
9 interval from -- If you'll refer to the cross-section, the
10 datum of the cross-section is the top of the lower Morrow
11 there, and this isopach represents from that datum point
12 down to that wiggly line down there on the bottom, which
13 I've interpreted to be the Mississippian unconformity.

14 And so what we're looking at here is thicks and
15 thins, which would -- the thicks would allow the deposition
16 of these lower Morrow channels within the area. And if you
17 look up there in Section 29, you can see that well, that
18 interval that -- from that lower Morrow to the Miss
19 unconformity is 140 feet thick, and that's where that big
20 lower Morrow channel lies within there. And we've
21 interpreted this map through this area here, and we feel
22 like we've identified a similar thickness at our location,
23 and that's what we want to drill.

24 Q. What conclusions have you reached from your
25 geologic study?

1 A. The area from the standpoint of Morrow production
2 from the middle Morrow is highly risky. The braided
3 channel facies is also risky. The natural upside here is
4 that lower Morrow channel facies, and as you can see, the
5 well in Section 29 is completely surrounded by about eight
6 or nine dryholes.

7 The most recent one drilled, in Section 32, is
8 represented by that open circle. I believe ARCO recently
9 drilled that well.

10 I do not have that data. That's still a tight
11 hole, as far as I know. But word is that they did not
12 encounter that sand. So you can see that the risk is
13 extremely high.

14 Q. Based on that risk, are you prepared to make a
15 recommendation to the Examiner as to the risk penalty that
16 should be assessed against the nonconsenting owners in this
17 spacing unit?

18 A. Yes, I am.

19 Q. What is that recommendation?

20 A. Two hundred percent.

21 Q. Do you think there's a chance that you could
22 drill a well on the proposed location that would not be a
23 commercial success?

24 A. Without a doubt, there is.

25 Q. Should this recommended risk penalty apply to all

1 formations that are being pooled?

2 A. Yes, sir.

3 Q. Does Enron seek to be the designated operator of
4 the proposed well?

5 A. We do.

6 Q. In your opinion, will the granting of this
7 Application and the drilling of this proposed well be in
8 the best interest of conservation, the prevention of waste
9 and the protection of correlative rights?

10 A. I do, and Enron also.

11 Q. Were Enron Exhibits 6 through 8 prepared by you or
12 compiled under your direction?

13 A. Yes, they were.

14 MR. OWEN: Mr. Examiner, I tender Exhibits Number
15 6 through 8.

16 EXAMINER STOGNER: Exhibits 6 through 18 will be
17 admitted --

18 MR. OWEN: Or 6 through 11.

19 EXAMINER STOGNER: I'm sorry, yeah, 6 through 11
20 will be admitted into evidence at this time.

21 Mr. Bruce, your witness.

22 MR. BRUCE: I don't have any questions, Mr.
23 Examiner.

24 EXAMINER STOGNER: Mr. Kellahin?

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

EXAMINATION

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BY MR. KELLAHIN:

Q. Mr. Zinz, let me ask you some questions --

A. Yes, sir.

Q. -- for clarification so I can tie your isopachs back to the cross-section.

A. Yes, sir.

Q. If you'll look at Exhibit 6, let's use the well in the middle, which is the Phillips well.

A. Yes, sir.

Q. It's currently a producing well, is it?

A. That's correct.

Q. And it's being produced out of its original perforations, shown down -- and I'm trying to figure out what that is. Is that what you've identified as the lower Morrow braided facies in that well?

A. That's correct, yes.

Q. And that's its current perforations and original perforations; is that right?

A. That's correct.

Q. Okay. When I look at Exhibit Number 9, show me on Exhibit 6 the top and the bottom of that particular interval that's being mapped on Exhibit 9.

A. On Exhibit 9?

Q. Yes, sir.

1 A. Okay, hang on just a second. Okay, that's the
2 bar facies, sir, and that will be from the lower Morrow
3 datum to the top, designated by "middle Morrow", and it's a
4 net-sand isopach of all those sands within that interval.

5 Q. All right. Let me do it again. The base is
6 what?

7 A. The base is that lower Morrow datum.

8 Q. Okay, and the top is -- ?

9 A. -- the middle Morrow marker.

10 Q. All right. That would be Exhibit 9, okay.

11 On Exhibit 10, show me where on Exhibit 6, then,
12 is the interval you're mapping for Exhibit 10.

13 A. That will be the one that's outlined with the
14 arrows on the cross-section that says "lower Morrow braided
15 facies".

16 Q. All right. The arrow identifies the top and the
17 bottom of that interval?

18 A. Yes, sir.

19 Q. All right, sir. Exhibit Number 11, would you do
20 the same thing for me?

21 A. That will be the interval over there, from the
22 Mississippian unconformity, which is the squiggly line, all
23 the way up to the lower Morrow datum.

24 Q. All right, the base is the Mississippi
25 unconformity, the top is the --

1 A. -- datum.

2 Q. -- lower Morrow datum?

3 A. Yes.

4 Q. So when I look at Exhibit 10, it's included
5 within the interval being mapped when I look at Map Number
6 11?

7 A. That's correct.

8 EXAMINER STOGNER: All right, that's -- I
9 couldn't figure that out. I've got you. Thank you.

10 EXAMINATION

11 BY EXAMINER STOGNER:

12 Q. Mr. Zinz, has this well been staked at this time?

13 A. Yes.

14 Q. And were you responsible for the staking of that
15 well?

16 A. Yes. I didn't physically go out there and stake
17 it, but I was responsible for getting it staked.

18 Q. I hate to be nit-picky, but it's a few feet off
19 from standard, and what was the reason for that?

20 A. If you look at your land map, I believe there's
21 some shallow wells in there.

22 MR. OWEN: Exhibit Number 1, Mr. Examiner.

23 THE WITNESS: Yeah.

24 EXAMINER STOGNER: Let me find it now.

25 THE WITNESS: This one.

1 EXAMINER STOGNER: Okay, I have it.

2 THE WITNESS: My geological exhibits don't show
3 anything but the deep wells within the area, and there's
4 quite a few shallow wells right there in that 40 acres
5 right there, and so we were just trying to get away from
6 them.

7 Q. (By Examiner Stogner) So they were not -- They
8 were surface obstructions, as opposed to any kind of
9 geological --

10 A. Yes, sir. I believe Mr. Tower referred to that
11 fact with -- We sent out an additional letter indicating
12 that we were moving that because of those, isn't that --

13 MR. TOWER: (Nods)

14 Q. (By Examiner Stogner) The letter then went to --
15 Are you referring to a letter to the OCD or to --

16 A. By Enron, sir.

17 MR. OWEN: I believe it's a letter dated April
18 11th, 1996, which is the second letter within Exhibit
19 Number 4. It starts on the third page of Exhibit Number 4,
20 the third paragraph. It notes that the location has been
21 moved slightly.

22 Q. (By Examiner Stogner) Referring back to Exhibit
23 Number 1, are there any producing wells over in the
24 southwest quarter of Section 6 at this time?

25 A. As far as I know, and based on this map, no.

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EXAMINER STOGNER: Are there any other questions of this witness?

MR. OWEN: Not at this time, Mr. Examiner.

EXAMINER STOGNER: You may be excused.

Do you have anything further at this time?

MR. OWEN: That's all I have, Mr. Examiner.

EXAMINER STOGNER: Does anybody else have anything further in Case Number 11,540?

If not, then this case will be taken under advisement.

(Thereupon, these proceedings were concluded at 9:00 a.m.)

* * *

I hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11540, heard by me on 30 May 1986.
Michael E. Stogner, Examiner
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 June 1st, 1996.



 STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998