

OIL CONSERVATION DIV.

STATE OF NEW MEXICO

90 NOV -4 AM 7:49 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:)

CASE NO. 12,252

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

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

October 21st, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, October 21st, 1999, 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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I N D E X

October 21st, 1999
 Examiner Hearing
 CASE NO. 12,252

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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 11:23 a.m.:

3
4
5
6
7 EXAMINER ASHLEY: At this time the Division calls
8 Case 12,252, Application of Enron Oil and Gas Company for
9 compulsory pooling, Eddy County, New Mexico.

10 Call for appearances.

11 MR. CARR: May it please the Examiner, my name is
12 Paul R. Owen, appearing on behalf of Enron Oil and Gas
13 Company.

14 I'm with the law firm Campbell, Carr, Berge and
15 Sheridan in Santa Fe, New Mexico.

16 I have two witnesses in this matter.

17 EXAMINER ASHLEY: Additional appearances?

18 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
19 representing Chi Energy, Incorporated.

20 I have no witnesses.

21 EXAMINER ASHLEY: Will the witnesses please stand
22 to be sworn in?

23 (Thereupon, the witnesses were sworn.)

24 MR. OWEN: May it please the Examiner, as my
25 first witness I call Mr. Patrick J. Tower.

1 PATRICK J. TOWER,
2 the witness herein, after having been first duly sworn upon
3 his oath, was examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. OWEN:

6 Q. Mr. Tower, can you please tell us your name for
7 the record?

8 A. Patrick J. Tower.

9 Q. And who do you work for?

10 A. Enron Oil and Gas Company.

11 Q. Mr. Tower, is Enron Oil and Gas Company currently
12 undergoing a name change?

13 A. Yes.

14 Q. What is the name to which the company is being --

15 A. The name shortly will be changed to EOG
16 Resources, Inc.

17 Q. At this time are EOG Resources, Inc., and Enron
18 Oil and Gas Company the same company --

19 A. Yes, all the assets --

20 Q. -- for all intents and purposes?

21 A. Yes, all assets, everything, is the same.

22 Q. Mr. Tower, have you previously testified before
23 the Division?

24 A. Yes.

25 Q. At the time of that testimony, were your

1 credentials as a petroleum landman accepted and made a
2 matter of record?

3 A. Yes.

4 Q. Are you familiar with the Application filed in
5 this case?

6 A. Yes, I am.

7 Q. Are you familiar with the lands in the subject
8 area?

9 A. Yes.

10 MR. OWEN: Mr. Examiner, I tender Mr. Tower as an
11 expert petroleum landman.

12 EXAMINER ASHLEY: Mr. Tower is so qualified.

13 Q. (By Mr. Owen) Mr. Tower, can you tell the
14 Examiner what Enron seeks with this Application?

15 A. Yes, Enron is seeking an order pooling all
16 mineral interests from the surface to the base of the
17 Mississippian Chester formation under the east half of
18 Section 4, Township 17 South, Range 28 East, for the east
19 half to be formed for a standard unit for all pools and
20 formations developed on 320-acre spacing, which would
21 include the Undesignated Dog Canyon-Strawn Pool and the
22 Undesignated Southeast Crow Flats-Morrow Gas Pool, the
23 southeast quarter to form a standard unit for all pools and
24 formations developed on 160, the east half of the southeast
25 quarter to form a standard unit for all pools and

1 formations developed on 80-acre spacing, and the southeast
2 southeast to form a standard unit for all pools and
3 formations developed on 40-acre spacing, with Enron's
4 Amtrack State Com Number 1 well to be drilled at a standard
5 location 660 feet from the south and east lines of Section
6 4, to those depths.

7 Q. Mr. Tower, you've stated that the pool, the
8 subject pool for the Morrow, is the Undesignated Southeast
9 Crow Flats-Morrow Gas Pool. Is it also possible that
10 another pool, the Red Lake-Morrow Pool, may be implicated
11 in this case?

12 A. Yes. When we get to Exhibit 1, we'll show our
13 location. There was a well in the southeast Crow Flats
14 field, approximately a mile and a half to the northwest of
15 our current location. However, there's some recent new
16 wells that may not be in the books yet, immediately south
17 of Enron's location, a well operated in Section 9 called
18 the Cannonball, by Chi. And we're checking into it, but
19 it's possible that that well may have been put in the Red
20 Lake-Morrow Gas Pool and may be a little closer.

21 So we will ascertain which pool prior to issuing
22 an order and make clear, you know, that it gets in the
23 proper pool. Both are Morrow gas pools.

24 Q. Based on your research in preparation for this
25 hearing, it appears that the subject well will be located

1 in the undesignated Dog Canyon -- or Crow Flats-Morrow Gas
2 Pool; is that right?

3 A. Yes, that's correct --

4 Q. Is it possible --

5 A. -- that's correct.

6 Q. -- that current developments could have -- or
7 recent developments could have led to the placement in
8 another undesignated pool?

9 A. That's correct.

10 Q. Okay. Mr. Tower, you've referenced Exhibit
11 Number 1. Why don't you refer to Exhibit Number 1 and
12 explain what it shows for the Examiner, please?

13 A. Okay. Exhibit Number 1 is a land plat, and on
14 there it depicts, the red outline, the spacing unit, being
15 the east half of the Section 4 for the well, and the red
16 location is the location for the Amtrack well, and in
17 general the land ownership in the surrounding area.

18 Q. Now, we've talked about the Morrow. Is the
19 Morrow the primary objective of this well?

20 A. Yes, it is.

21 Q. Do you have any other prospects?

22 A. There's additional potential in multiple zones,
23 which I may let the engineer address a little more in
24 detail.

25 Q. Okay. Now, you talked about the ownership being

1 generally represented on Exhibit Number 1. Is it also
2 specifically represented on Exhibit Number 2?

3 A. Exhibit Number 2 is a copy of the operating
4 agreement that's been proposed. Some parties have executed
5 it. But in essence it depicts the ownership in the east
6 half of Section 4 for the drilling of this well, the
7 working interest.

8 Q. And what percentage of the acreage is voluntarily
9 committed to the well at this time?

10 A. Approximately -- Let's see. Approximately 90
11 percent.

12 Q. Okay. Now, I notice you're referring to what
13 appears to be Exhibit Number 3. Can you tell us what Enron
14 Exhibit Number 3 is.

15 A. Yes, Exhibit Number 3 is a listing of those
16 parties whose interests are not voluntarily committed.

17 However, I will clarify. As of this morning, the
18 very first company listed here, Southwestern Energy
19 Production Company, is to be dismissed from this list. We
20 have reached a voluntary agreement. Therefore, it is just
21 the remaining companies below Southwestern Energy that will
22 be the subject of the pooling.

23 Q. So even though it appears that based on Exhibit
24 Number 3, that approximately 26 percent of the ownership
25 interest in the east half had not committed to this well,

1 as of this morning you have approximately 95 percent; is
2 that --

3 A. Or 90, if those add up -- whatever the remaining
4 add up, and -- approximately 9 to 10 percent is
5 uncommitted, if I add that right.

6 Q. Now, I assume you're proposed this well through
7 an AFE of some sort. Is that reflected on Exhibit Number
8 4?

9 A. Yes, the Exhibit Number 4, you will note, there
10 are three AFEs here. In essence, they are basically the
11 same AFE for this well.

12 However, I did want to point out that the
13 earliest AFE, which is dated -- the one on the back page,
14 is dated at the bottom 8-27, initially Enron had proposed
15 this at a different location than the subject today.
16 However, there was a dry playa lake that we had to avoid.
17 So therefore the location -- The second AFE was then moved
18 to the current location, being 660 feet from the south and
19 from the east.

20 And the third AFE in essence, same thing, it just
21 updated the interest to more exact -- For example, Enron's
22 working interest was carried out decimally, just more of
23 the detailed material. But in essence, the final AFE, the
24 costs are reflected there for the dryhole and completion,
25 or the final cost that we're dealing with, with the parties

1 here today.

2 Q. Now, this dry playa lake that you're talking
3 about, that's a topographical feature; is that correct?

4 A. Yes, it is.

5 Q. It's not a subsurface structure that you're
6 moving for --

7 A. No.

8 Q. -- geologic reasons?

9 A. That is correct.

10 Q. Okay. Now, the costs that are reflected on the
11 Exhibit Number 4 for a dryhole and completed well, are
12 those in line with what's been charged by other operators
13 in the area?

14 A. Yes, they are. And you'll see on the top AFE,
15 the total drilling cost is estimated to be \$378,200 for
16 this 10,200-foot test, with the total well cost estimated
17 to be \$767,500.

18 Q. And on that top AFE, is that the AFE under which
19 you're currently operating?

20 A. Yes, it is.

21 Q. Do you anticipate that the costs reflected on the
22 top AFE of Exhibit Number 4 are the projected well costs
23 for this particular well?

24 A. Yes, that is correct.

25 Q. Now, on that AFE also it appears that you're

1 estimating about 20 working days to drill this well; is
2 that correct?

3 A. Yes.

4 Q. Do you currently have a drilling rig scheduled
5 for this project?

6 A. Yes, the drilling rig is -- Actually, our plans
7 are, it will be moving in to spud this, this coming Monday.
8 Today is Thursday.

9 Q. So when do you anticipate having a completed hole
10 for this project?

11 A. Within 20 to 30 days, barring no problems.

12 Q. Do you request an expedited order in this case?

13 A. Yes, we would.

14 Q. Okay.

15 A. And I will point out, part of the reason for the
16 expedition, trying to get it in year end, but part of it
17 was some of the parties I'm going to address that are
18 involved in this well have requested -- there was some
19 discussion on location, and they requested us to -- that
20 they would agree to this location, certain things, if Enron
21 would expedite and go ahead and get it drilled as soon as
22 possible.

23 So the parties involved, including some of the
24 ones being force-pooled, have agreed to that, so we are
25 trying to expedite it also to accommodate the agreements

1 that we have in place.

2 Q. Well, Mr. Tower, let's go ahead and talk about
3 those other parties. Exhibit Number 5, I believe, reflects
4 some efforts that you've made to obtain the voluntary
5 joinder of these interest owners; is that correct?

6 A. Yes.

7 Q. Why don't you explain the documents which
8 comprise Exhibit Number 5 --

9 A. Okay.

10 Q. -- for the Examiner?

11 A. On Exhibit 5, there's actually two sets here.
12 I've got them broken into two groups, just for clarity.
13 And the first group should have a letter with Chi Energy,
14 Inc., on the top. This was the original well proposal to
15 Chi.

16 Now, Chi has voluntarily agreed and signed
17 Enron's joint operating agreement. However, the one party,
18 as you go through this material, the second page shows
19 material, Southwestern Energy, and that's to be ignored.
20 As of this morning, they were dismissed. But we put it in
21 until then.

22 Going down, the only other party that is related
23 to Chi that is the subject of our force pooling on the
24 original list is Warren Resources with 1.88 approximate
25 percent. Initially, when Enron made this proposal, Chi is

1 the only one, and still to this date, that has any record
2 title ownership in this east half of 4.

3 Warren is simply a contractual partner with Chi
4 under an operating agreement between Chi Energy and Warren,
5 et al., with Chi being the operator. Enron was not aware
6 of this until Chi advised us, and there's some material in
7 here where they faxed us some of their built-in partners
8 contractually that are bound by the Chi operating
9 agreement.

10 Our agreement was to -- since they have an
11 operating agreement in place, was to sign Enron's operating
12 agreement, which will supersede the one they have in place,
13 reflecting Enron as operator and therefore for the east
14 half. Chi has signed it. However, we have not received
15 Warren Resources at this point, and therefore they're the
16 subject of the order.

17 Chi has spoken on behalf of Warren, however,
18 since we were going to have them sign a new operating
19 agreement reflecting Enron's operating agreement. We did
20 list them, although Chi has represented under their
21 operating agreement that they're operator for Warren.

22 Q. Let me see if I understand the situation. Is it
23 your understanding that whatever interests Warren has in
24 this subject spacing unit, it has through contractual
25 arrangements with Chi?

1 A. Yes, it is the Chi working -- Yes.

2 Q. And is it your understanding that Chi remains a
3 record owner of that property?

4 A. That is correct.

5 Q. And is it also your understanding that whatever
6 interest Warren has in that spacing unit is committed to an
7 operating agreement under which Chi is the operator?

8 A. That is correct.

9 Q. And is it your understanding that Chi represents
10 whatever interests Warren has in this --

11 A. That is correct.

12 Q. -- acreage?

13 Q. And has Chi, in fact, represented that it does
14 represent the interests --

15 A. Yes.

16 Q. -- of Warren?

17 A. I've had direct conversations with Mr. John
18 Qualls at Chi Energy, with Mr. Bill Bergman who is one of
19 the owners at Chi, and also with a Mr. Gary Green. And in
20 all those conversations they represented that, and it is
21 simply a matter of trying to get Warren to get the
22 paperwork in. However, at this point we have no voluntary
23 agreement. We have agreed, as soon as we do have that, as
24 far as Enron's operating agreement, we would dismiss
25 Warren. We're just simply trying to cover an interest if

1 it wasn't covered through the Chi.

2 Q. Okay. Now, you mentioned a letter to Chi that
3 should have been on the top of Exhibit Number 5. Three
4 pages down, is this the letter to which you were referring?
5 Three pages down from the top of Exhibit Number 5?

6 A. Which letter? What's the date of that? I'm not
7 sure --

8 Q. August 27th, 1999.

9 A. Yeah, that's the top letter on the Chi Energy.

10 Q. Okay, yes.

11 A. Yes.

12 Q. Okay.

13 A. Okay.

14 Q. Perhaps my copy is --

15 A. It's in a different order.

16 Q. -- is shuffled.

17 A. Okay, the letter of August 27, 1999, is the
18 original proposal letter to Chi Energy, Inc.

19 Q. Okay. Now, there's a second group of letters
20 representing some efforts that you made to obtain voluntary
21 joinder. I think those comprise Exhibit Number 6. Can you
22 tell us about that?

23 A. Okay, that's right, they're separate exhibits.
24 I'm sorry.

25 Exhibit 6 is the correspondence with the

1 remaining parties that are the subject of the pooling
2 today, and you will note there Yates Petroleum Corporation,
3 Yates Drilling Company, ABO Petroleum Corporation and MYCO
4 Industries, Inc.

5 But basically this shows the correspondence and
6 negotiations with Yates. They have indicated they will
7 likely join the well. However, at this point we do not
8 have a signed operating agreement in place, and they have a
9 condition placed on it that we're trying to work out. And
10 again, it's our hope that we will reach voluntary
11 agreement. However, we do not have such a thing. And at
12 such point if that does happen, we will dismiss them from
13 this hearing.

14 Q. Now, ordinarily, Mr. Tower, given this situation,
15 would you have perhaps sought a continuance to seek
16 voluntary joinder with Yates, but under the circumstances
17 with your drilling rig coming on line are you proceeding
18 with this hearing just simply to get that order because you
19 have the rig coming on line?

20 A. That is correct. And again, it was part of our
21 arrangement with most of these companies at this location,
22 you know, they actually imposed part of this duty on Enron,
23 and we agreed to it to expedite it. So we have the rig
24 coming and also part of the relationship, they would like
25 to see this well drilled this year and -- soon. So

1 basically that's why we're proceeding.

2 Q. Okay. Now, has actual notice of this hearing
3 been provided to all the parties which you previously
4 indicated have not voluntarily joined the project?

5 A. Yes, it has.

6 Q. Does Exhibit Number 7 reflect that notice?

7 A. Yes, it does.

8 Q. Now, I want to emphasize on Exhibit Number 7,
9 about five or six pages down there's a letter to Yates
10 Petroleum Corporation and associated entities. Does that
11 reflect notice to all of the entities which your records
12 show are represented by Yates?

13 A. Yes.

14 Q. And the next letter, Mr. Tower, reflects a letter
15 to Chi Energy. Is it your understanding that that letter
16 provided notice to Warren as well?

17 A. Yes.

18 Q. Is that based on the representation of Chi that
19 they represent the interests of Warren?

20 A. That is correct.

21 Q. Okay. Mr. Tower, have you made an estimate of
22 the overhead and administrative expenses while drilling and
23 producing the well if it is a successful well?

24 A. Yes, we would recommend that the drilling well
25 rate be \$5800 and the producing well rate be \$580,

1 generally in line with the Ernst and Young survey, and also
2 is the same rate that the -- 90 percent of the voluntarily
3 committed parties have signed under the current operating
4 agreement to govern this well.

5 Q. Now, you said those are based on the Ernst and
6 Young. Are they also in line with what's being charged by
7 other operators --

8 A. Yes.

9 Q. -- of similar wells in the area?

10 Do you recommend that these figures be
11 incorporated into any order which results from this
12 hearing?

13 A. Yes, we do.

14 Q. Mr. Tower, were Exhibits 1 through 7 prepared by
15 you or compiled under your direction and supervision?

16 A. Yes, they were.

17 MR. OWEN: Mr. Examiner, I tender Exhibits 1
18 through 7.

19 EXAMINER ASHLEY: Exhibits 1 through 7 will be
20 admitted into evidence.

21 MR. OWEN: That's all I have of this witness at
22 this time.

23 EXAMINATION

24 BY EXAMINER ASHLEY:

25 Q. Mr. Tower, I'm looking at Exhibit Number 3.

1 A. Okay. Let's see -- Yes, sir.

2 Q. Okay, my understanding is that Southwest has
3 voluntarily agreed as of this morning, and you're still in
4 the process of working with the other remaining -- with
5 Warren and Yates?

6 A. That is correct.

7 Q. Now, since Chi represents Warren, do you have to
8 have Warren's sign-off on this?

9 A. Yes, as far Enron is concerned, because we have
10 not seen or are not party to the operating agreement that
11 is in place between Warren and Chi Energy.

12 Q. Okay.

13 A. So Enron has a new operating agreement, and it
14 has language in it that will supersede that and place
15 Enron's in place. However, we have not contractual
16 relationship with Warren at this point, although Chi does
17 under their operating agreement, which we are not a party
18 to.

19 Q. Okay. Now, back to Exhibit 2.

20 A. Okay.

21 Q. This is the total breakdown of all interests of
22 the parties to this agreement?

23 A. That is correct.

24 Q. Does that apply to all the different spacing
25 units that you were pooling?

1 A. No, in essence you will have the same parties
2 involved at all those different spacing units that we
3 mentioned earlier. However, the percentages will differ to
4 some extent, depending which formation -- whether you end
5 up with 160 or 80 or 40. However, it is in essence the
6 same group that would be involved, that are uncommitted, in
7 those other spacing units as well.

8 Q. So Enron doesn't hold 100 percent of the working
9 interest in any one of these spacing units?

10 A. No.

11 Q. Okay.

12 A. Enron does own an ownership in all the spacing
13 units.

14 Q. But not 100 percent --

15 A. No, that is correct.

16 EXAMINER ASHLEY: Okay. That's all I have.
17 Thank you.

18 MR. OWEN: May it please the Examiner, as our
19 second witness in this matter we call Mr. Randy Cate.

20 RANDALL S. CATE,

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

23 DIRECT EXAMINATION

24 BY MR. OWEN:

25 Q. Mr. Cate, would you please tell us your full

1

NAME?

2 A. It's Randall Stuart Cate, C-a-t-e.

3 Q. And Mr. Cate, where do you work?

4 A. I work in Midland, Texas, for EOG Resources, Inc.

5 Q. And again, is EOG Resources, Inc., the same
6 company as Enron Oil and Gas Company?

7 A. Yes, it is.

8 Q. Okay. What do you do for EOG Resources?

9 A. I'm project reservoir engineer, primary for the
10 State of New Mexico operations.

11 Q. I want to clarify something again. Is EOG
12 Resources, Inc., commonly referred to in this Application
13 and in Mr. Tower's testimony as Enron?

14 A. As Enron, yes.

15 Q. Okay. Have you previously testified before this
16 Division or one of its Examiners and had your credentials
17 as a petroleum engineer accepted and made a matter of
18 record?

19 A. Yes, I have, several times.

20 Q. Are you familiar with the Application filed in
21 this case?

22 A. Yes.

23 Q. Are you familiar with the project?

24 A. Yes, I am.

25 MR. OWEN: Mr. Examiner, I tender Mr. Cate as an

1 expert in petroleum engineering.

2 EXAMINER ASHLEY: Mr. Cate is so qualified.

3 Q. (By Mr. Owen) Mr. Cate, have you prepared
4 certain exhibits for presentation in this case?

5 A. Yes, I have.

6 Q. Why don't we turn to the first one, Enron Exhibit
7 Number 8? Can you explain that exhibit for the Examiner?

8 A. Yes, Enron Exhibit Number 8 is an area production
9 and EUR map that I generated. It's about, oh, three or
10 four square miles in either direction from our proposed
11 location of the Amtrack State, which is in the -- The
12 proration unit in the center of the page is shown in the
13 red. And it gives you an idea of the pays that we may
14 encounter and some of the reserve potential of those pays.

15 Now, our primary target is the Morrow, Morrow
16 clastics. There have been new wells, if you look basically
17 to the south, within -- All the wells to the south about
18 two miles are all completions within the last year. Okay?
19 And that's why I reflect that it's a new well. And these
20 rates that we have, we either acquired through field
21 reports or through telephone conversations with the
22 operators themselves.

23 So several of the wells to the south that
24 indicate new wells have rates. It's still too early to
25 tell what the reserve potential is definitely going to be,

1 but I can make some educated guesses based on the
2 information, the pay thicknesses and all.

3 If you look down at the legend, the Morrow
4 production and EURs are referenced in red. You'll notice
5 that there are green numbers. That is Atoka, primarily
6 Atoka sands that produce in that area, none of which have
7 been found commercial.

8 Also, the Strawn is indicated in just one well,
9 just due west of our location two miles, 400 million cubic
10 feet produced, again, not commercial.

11 So in this whole basically 36-square-mile area,
12 the only commercial production that's been established was
13 in the Morrow for the deeper pays.

14 Now, there are some shallow water floods out
15 here, Queen, the Red Hills -- or not Red Hills, Red Lake-
16 Queen, and it's producing out of Permian. We don't see
17 much opportunity to make a well there either, but it does
18 produce there.

19 Statistically, if you look at this whole area,
20 there's approximately 30 penetrations through the Morrow,
21 only five of which have achieved what I would call
22 commercial reserves of 2 BCF or more. So -- And I believe
23 that's pretty much the chance of success that any of these
24 wells in this area would have to achieve a commercial well.

25 Q. Now, it appears that there's a blue line

1 connecting some of these wells. Does that blue line
2 connect the wells that are represented on your cross-
3 section, which is Exhibit Number 10, I believe?

4 A. Yes.

5 Q. Okay. And have you gone in a north-south
6 direction there for any particular reason?

7 A. The north-south reason was chosen that when we
8 map this sand out on a gross thickness, it lines up north-
9 south. And that takes us right into our next exhibit.

10 Q. And is that north-south trending indicated on
11 Exhibit Number 9?

12 A. Yes, it is. Exhibit Number 9 is a map of the
13 gross Morrow isopach. The values shaded in brown are
14 greater than 200 feet. It's simply taken from the top of
15 the Morrow clastics to the top of the Barnett or the base
16 of the lower Morrow.

17 The white is what we consider thinner areas or
18 less than 200 feet. There is a very good correlation
19 between the greater-than-200-feet thicknesses and the best
20 chance of achieving -- finding sands and also commercial
21 wells.

22 But I did want to point out, that's not a
23 guarantee. If you look at the Crow State Com Number 1,
24 Section 32, which is approximately 1 mile to the northwest,
25 that well did have over 222 feet of gross isopach

1 thickness, but it only managed to make 10 million feet of
2 gas out of the Morrow section.

3 If you go south to the thickest well on the map,
4 which is at -- due south of our location about three miles,
5 and it is the southernmost well on the cross-section,
6 you'll notice the P.I.B., operated by OXY, it has 325 feet
7 of section. It's only producing 840 MCF a day after IP'ing
8 approximately six months ago at over 3 million a day. It
9 appears to me a limited reservoir, will not make commercial
10 status.

11 And that just indicates one of the risks. You
12 can have the thickness, find some sand, but then still
13 encounter limited reservoirs.

14 But in general we do see the gross isopach
15 thicknesses trending north-south. To the north is the
16 Buffalo Valley Diamond Mound field, which does have over
17 100 wells. And we believe possibly that those sands could
18 be the ones that we're looking for, that we are finding
19 producing wells in the Cannonball 9 just one mile south and
20 then down in the Spurk 16 two miles south.

21 So we're simply trying to extend that production
22 in what we perceive as the isopach thick.

23 Q. So have you picked your location based on the
24 thickness of the interval in that particular spacing unit?

25 A. Yes, and when we had to move the location due to

1 the dry Playa lake, we moved it just due south to stay in
2 what we map as the Morrow thick.

3 Q. Was the location moved at all because of geologic
4 reasons --

5 A. No.

6 Q. -- or engineering reasons?

7 A. No.

8 Q. Did the move in location affect, in your opinion,
9 the chance of success?

10 A. No, it's still a very risky location.

11 Q. Did it improve or decrease the chance of success,
12 either way?

13 A. If it improved it by moving a little closer
14 south, it's very negligible.

15 Q. Okay.

16 A. One of the problems with the Morrow sands is that
17 they're very discontinuous, and between wells, even, you
18 may not encounter the same reservoirs. And that leads us
19 to a cross-section which we put together to show that.

20 Q. And is the cross-section Enron Exhibit Number 10?

21 A. Yes, Enron Exhibit Number 10.

22 Q. Why don't you tell us about that exhibit?

23 A. Again, it's a north-south cross-section, and it
24 indicates that the wells in the Morrow clastics can
25 encounter thicknesses, and so the well that's the P.I.B.

1 well, which is furthest to your left or the southernmost
2 well on the cross-section, again, did encounter a large
3 interval and has some net sand showing up in it. But
4 again, it appears that this well most likely is a limited
5 nature.

6 Now, you go to the second well from the left,
7 called the Spurr 16, and that well found some different
8 sands, which was one mile north of the P.I.B., found
9 different sands that they are producing out of. Now, this
10 well is 8 to 9 million a day. It appears like it should be
11 a commercial well.

12 But again, it's only been producing for -- since
13 July. So we need to, you know, have more data to find out
14 just how commercial it is.

15 And then the Cannonball well, which is in the
16 middle of the cross-section and is approximately three-
17 quarters of a mile due south of our location, encountered
18 some other sands that they shot just the lower interval at
19 this point, and it appears like they've got around a 2-
20 million-a-day well.

21 But if you look across -- The point being, if you
22 look across the cross-section, it's clear that a lot of
23 these sands are coming and going. They don't have the
24 areal extent from well to well. Even when they do, their
25 porosity may be high in one well and low in another, and

1 that's just one of the Morrow risks.

2 So our Amtrack location, north of the Cannonball,
3 if we're fortunate enough to find a lower -- or a Morrow
4 thick and find some sands, I still would not expect it to
5 be in communication with the Cannonball well.

6 Q. Mr. Cate, based on the discontinuity of the sand,
7 the Morrow sand here, do you think there's a chance that
8 you can drill a well that will not be a commercial success
9 at the location?

10 A. Yes, there's a very significant chance.

11 Q. Do you have an estimate of the risk penalty that
12 should be applied to the nonconsenting working interest
13 owners?

14 A. Yes, the maximum 200-percent penalty should be
15 applied.

16 Q. Okay. Mr. Cate, in your opinion will the
17 granting of this Application be in the best interests of
18 conservation, the prevention of waste and the protection of
19 correlative rights?

20 A. Yes, it will.

21 Q. Mr. Examiner -- Or Mr. Cate, were Enron's
22 Exhibits Numbers 8 through 10 prepared by you or compiled
23 under your direction?

24 A. Yes, they were.

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

1 Numbers 8 through 10.

2 EXAMINER ASHLEY: Exhibits 8 through 10 will be
3 admitted as evidence.

4 MR. OWEN: And that's all I have of this witness
5 at this time.

6 EXAMINATION

7 BY MR. ASHLEY:

8 Q. Mr. Cate, what's the TD of the well, proposed TD?

9 A. Proposed TD, I've got to look on the AFE. I
10 believe it's 10,500, but --

11 MR. TOWER: 10,200.

12 THE WITNESS: Yes, 10,200.

13 Q. (By Examiner Ashley) Were any of the other
14 Morrow wells in this area drilled under compulsory pooling
15 orders?

16 A. I'm not really sure.

17 EXAMINER ASHLEY: Okay. I have nothing further.
18 Thank you.

19 THE WITNESS: Thank you.

20 EXAMINER ASHLEY: There being nothing further in
21 this case, Case 12,252 will be taken under advisement.

22 (Thereupon, these proceedings were concluded at

23 12:03 p.m.) I do hereby certify that the foregoing is
24 a correct record of the proceedings in
the Examiner hearing of Case No. 12,252,
25 heard by me on 10-21 1999

Mark Ashley, Examiner
Off Conservation Division
STEVEN T. BRENNER, CCR
(505) 989-9317

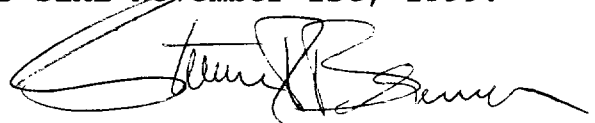
CERTIFICATE OF REPORTER

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 November 1st, 1999.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 2002