

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. 11,710

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 23rd, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, January 23rd, 1997, 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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January 23rd, 1997
Examiner Hearing
CASE NO. 11,710

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* * *

A P P E A R A N C E S

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.
 Suite 1 - 110 N. Guadalupe
 P.O. Box 2208
 Santa Fe, New Mexico 87504-2208
 By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 11:10 a.m.:

3 EXAMINER CATANACH: All right, at this time we'll
4 call Case 11,710, which is the Application of Enron Oil and
5 Gas Company for compulsory pooling, Eddy County, New
6 Mexico.

7 Call for appearances.

8 MR. CARR: May it please the Examiner, my name is
9 William F. Carr with the Santa Fe law firm Campbell, Carr,
10 Berge and Sheridan.

11 We represent Enron Oil and Gas Company in this
12 matter, and I have two witnesses.

13 EXAMINER CATANACH: Additional appearances?

14 Okay, will the witnesses please stand to be sworn
15 in?

16 (Thereupon, the witnesses were sworn.)

17 MR. CARR: May it please the Examiner, initially
18 in this matter I would note that what Enron is seeking is
19 an order pooling various spacing and proration units in the
20 west half of Section 36 of Township 17 South, Range 29
21 East.

22 Enron does not own any interests if the well
23 should come in as -- in a formation that would be spaced on
24 40 acres, being the northeast of the southwest, and
25 therefore the portion of the case that relates to 40-acre

1 spacing will have to be dismissed.

2 PATRICK J. TOWER,

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. CARR:

7 Q. Would you state your name for the record, please?

8 A. Patrick J. Tower.

9 Q. Where do you reside?

10 A. Midland, Texas.

11 Q. By whom are you employed?

12 A. Enron Oil and Gas Company.

13 Q. And what is your current position with Enron?

14 A. Project landman.

15 Q. Mr. Tower, have you previously testified before
16 this Division?

17 A. Yes, I have.

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

21 A. Yes, they were.

22 Q. Are you familiar with the Application filed in
23 this case?

24 A. Yes, I am.

25 Q. And are you familiar with the status of the lands

1 in the subject area?

2 A. Yes, I am.

3 MR. CARR: Are Mr. Tower's qualifications
4 acceptable?

5 EXAMINER CATANACH: They are.

6 Q. (By Mr. Carr) Would you briefly summarize for
7 the Examiner what Enron seeks with this Application?

8 A. Enron seeks an order pooling all mineral
9 interests from the surface to the base of the Morrow
10 formation underlying the west half, Section 36, Township 17
11 South, Range 29 East, west half for all formations
12 developed on 320-acre formations, the southwest quarter for
13 all formations developed on 160-acre spacing, and the east
14 half of the southwest quarter for all formations developed
15 on 80-acre spacing.

16 Enron proposes to dedicate the pooled units to
17 the Sand Tank 36 State Com Number 1 well to be drilled at a
18 standard location 1980 from the south and west lines, said
19 Section 36, and also to be covered as the cost of drilling
20 and completing, allocation of cost, as well as actual
21 operating cost and charges, and the proper risk assessment
22 for this well.

23 Q. Let's go to what has been marked for
24 identification as Enron Oil and Gas Company Exhibit Number
25 1. Will you identify and review that for Mr. Catanach?

1 A. Exhibit Number 1 is a land plat depicting the
2 lands involved, with the red outline being the proration
3 unit for the -- on a 320-acre basis, being the west half of
4 said Section 36, with the red dot showing the legal
5 location within the proration unit.

6 Q. What is the primary objective in this well?

7 A. The Morrow formation.

8 Q. Let's go to Enron Exhibit Number 2. Would you
9 refer to this and review for the Examiner the status of the
10 ownership in this tract?

11 A. Exhibit Number 2 depicts the owners within this
12 west half. Enron Oil and Gas Company has 50 percent
13 working interest; Costilla Energy, Inc., has 22.75 percent
14 working interest; Joel Miller, 1.125 percent working
15 interest; Jay E. Floyd, 1.125 percent interest, and
16 Phillips Petroleum Company, 25 percent interest.

17 Q. At this point in time, with whom has Enron
18 reached voluntary agreement?

19 A. At this time, we've reached voluntary agreement
20 with 75 percent of the interests -- all the parties, with
21 the exception of Phillips. However, in an agreement with
22 Miller, Floyd and Costilla, the agreements are not in
23 place, and they -- we have agreed that once those are
24 executed, which we anticipate will be shortly, they will be
25 dismissed from this hearing.

1 Q. And will you advise the Division at the time that
2 occurs?

3 A. Yes, we will.

4 Q. Can you go to Enron Exhibit Number 3, identify
5 and review that?

6 A. Exhibit Number 3 is our -- Enron's cost estimate
7 for the drilling of this test. It is an 11,800-foot test.
8 The estimated dryhole cost is \$512,700. The total
9 completed well cost is estimated to be \$866,200.

10 Q. Are these costs in line with what is charged for
11 other similar wells in this area?

12 A. Yes, it is.

13 Q. Mr. Tower, could you review for the Examiner the
14 efforts made by Enron to obtain the voluntary participation
15 in this well of Phillips Petroleum Company?

16 A. Yes, there have been numerous conversations among
17 myself and all of the parties listed on Exhibit Number 2.
18 A preliminary meeting with Phillips took place in late
19 October to advise them that we were intending to drill a
20 Morrow test in this section, and then subsequent to that,
21 in discussions, proposals were sent out.

22 Do you want me to get into the --

23 Q. Yes, sir.

24 A. -- next exhibit?

25 A. Exhibit Number 4 will identify the actual

1 correspondence.

2 In addition, again, there were numerous
3 conversations, with the original well proposal going out to
4 the parties November 21st, and then subsequent
5 correspondence there between the parties, sending them an
6 operating agreement and discussions towards seeking some
7 type of voluntary agreement.

8 None of the parties had any objection with us
9 being up here. Again, voluntary agreements have been
10 reached, subject to contract approval, with all but
11 Phillips. Phillips had no concern with being force-pooled
12 and indicated that might be required before they can get
13 their evaluation or decision made.

14 Q. Mr. Tower, has Enron made a good-faith effort to
15 obtain voluntary joinder of all interest owners in the west
16 half of Section 36?

17 A. Yes, we have.

18 Q. Is Exhibit Number 5 a copy of an affidavit
19 confirming that copies of the Application and notice of
20 today's hearing have been provided to Phillips and the
21 other affected owners in accordance with Oil Conservation
22 Division rules and regulations?

23 A. Yes, it is.

24 Q. Have you made an estimate of the overhead and
25 administrative costs to be incurred while drilling this

1 well and also while producing it if it is successful?

2 A. Yes, we have. We are recommending a drilling
3 well rate of \$5800 and a producing well rate of \$580.

4 Q. And what is the source of these figures?

5 A. It's based on the Ernst and Young 1995 survey,
6 it's in line with that, and also with additional operating
7 agreements we have in place in this area.

8 Q. So these are in line with what other operators
9 charge in the area?

10 A. That is correct.

11 Q. Do you recommend that these figures be
12 incorporated into the order that results from today's
13 hearing?

14 A. Yes, we do.

15 Q. Were Exhibits 1 through 5 prepared by you or
16 compiled at your direction?

17 A. Yes, they were.

18 Q. Will Enron be calling an additional witness to
19 review the technical portion of this case?

20 A. Yes, we will. Yes.

21 MR. CARR: At this time Mr. Catanach, I would
22 move the admission into evidence of Enron Exhibits 1
23 through 5.

24 EXAMINER CATANACH: Exhibits 1 through 5 will be
25 admitted into evidence.

1 MR. CARR: And that concludes my examination of
2 Mr. Tower.

3 EXAMINATION

4 BY EXAMINER CATANACH:

5 Q. Mr. Tower, you actually started negotiating with
6 these parties in November?

7 A. Actually, with Phillips in October, the remaining
8 parties in November.

9 Q. Okay. Costilla has agreed to participate?

10 A. They've agreed to participate, and we've been
11 negotiating an operating agreement. They advised me
12 yesterday that they anticipate having it signed in the next
13 couple days, had no objection with us testifying that,
14 assuming there's no problems with the JOA, we could force-
15 pool them, but we will immediately dispense them as soon as
16 we have that in place.

17 Q. And the Miller/Floyd interests, you have verbal
18 agreement?

19 A. We have verbal agreement. They have agreed to
20 assign that interest to Enron for some consideration, as
21 just a matter of the paperwork transpiring. It's verbal at
22 this point.

23 EXAMINER CATANACH: Nothing further.

24 MR. CARR: At this time, Mr. Catanach, we would
25 call Randy Cate.

1 RANDALL S. CATE,
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. CARR:

6 Q. Would you state your name and place of residence?

7 A. Yes, Randall Cate. I live in Midland, Texas.

8 Q. Where do you reside -- I mean, by whom are you
9 employed?

10 A. I'm employed by Enron Oil and Gas.

11 Q. And what is your position with Enron?

12 A. I'm project reservoir engineer.

13 Q. Mr. Cate, have you previously testified before
14 this Division?

15 A. Yes, I have.

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

19 A. Yes, they were.

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

22 A. Yes, I am.

23 Q. Have you made a technical study of the area
24 involved in this Application?

25 A. Yes, I have.

1 Q. Are you prepared to share the results of that
2 study with Mr. Catanach?

3 A. Yes.

4 MR. CARR: Are the witness's qualifications
5 acceptable?

6 EXAMINER CATANACH: They are.

7 Q. (By Mr. Carr) Mr. Cate, let's first go to what
8 has been marked for identification as Enron Exhibit Number
9 6. Will you identify and review that, please?

10 A. Yes, Exhibit Number 6 is a production and test
11 study of the area of, oh, two miles, approximately two
12 miles in each direction from our Sand Tank 36 State Com
13 Number 1 location.

14 The different colors designate different tests or
15 production from the producing formations that are listed in
16 the legend at the bottom.

17 NCT stands for a noncommercial test. If there
18 was a DST, I indicate that.

19 The date at the -- Near the wellbores, the date
20 indicates the month of first production. And of course,
21 the -- then the cumulative production through December of
22 1996 is also indicated next to each well.

23 Q. Let's go to Exhibit Number 7, the cross-section.

24 A. Exhibit Number 7 is a cross-section that has
25 these pay zones that are productive in this area.

1 Q. Is there a trace for this cross-section on the
2 subsequent exhibit?

3 A. Yes, there is a trace for the cross-section on
4 Exhibit Number 8.

5 Q. Would you review the cross-section with that
6 Exhibit 8 before you?

7 A. The cross-section runs from the -- in the
8 northwest, which is A, designated A, that's the Grayburg
9 Deep Unit Number 11, which Phillips operated, Enron had an
10 interest in. It was a dry hole. This well is
11 approximately one and a half miles north of the proposed
12 location.

13 The second well to the left that would then run
14 southwest -- or southeast, excuse me, of our location, is
15 the Sand Tank 1 Federal Com Number 1, which Enron operates
16 and is a recent completion in the area.

17 The third well to the right would then be the
18 Sand Tank 6 Federal Com Number 1, which Enron operates
19 also, had first production in September of 1996.

20 And then back to the north and the Sand Tank 31
21 Federal Com Number 1 in the south half of Section 31, which
22 Enron operated and is right now probably going to be made
23 into a disposal well after testing the Morrow and some
24 uphole zones as noncommercial.

25 If I could, on Sections -- I mean on Exhibit 6,

1 let me just quickly state, this is a relatively new area.
2 The primary objective is the Morrow. It will also be the
3 middle Morrow, is probably the best chance of success if we
4 do hit a sand here.

5 All the commercial production so far has been
6 found to the south of this location. The nearest Strawn
7 production, as indicated in blue, is two to three miles
8 away. We don't anticipate it here. We do not have maps on
9 it, but we would like it to be included. It is a 320 gas
10 spacing unit for the Strawn. It is a carbonate. It is
11 also listed at the top of these cross-sections.

12 Each well will encounter Strawn. The risk in the
13 Strawn is very erratic and discontinuous porosity intervals
14 that do contain the gas. They are limited reservoirs.
15 They are very low porosity and very low producing rates, in
16 the 200- to 500-MCF-a-day. And if there's no extent, they
17 fall very dramatically.

18 And the cross-section indicates the discontinuity
19 of the porosity units within the Strawn.

20 Also the Atoka, there is one completion on this
21 whole area that Enron has now dual completed in the Sand
22 Tank 6 Number 1, and that's indicated by the green
23 production. Again, very limited extent. The well is
24 declining very rapidly. I estimate approximately 50 acres
25 of reservoir size.

1 As you can see on the cross-section, on the wells
2 on either side of it, there is no sand present. We would
3 like that to be included, we are force-pooling for the
4 Atoka, but again I did not provide a map, and there's only
5 one well with any sand in it.

6 Then we get to the middle Morrow, which is
7 approximately the middle of the cross-section. That would
8 be the interval we expect. It is a sandbar type of system.
9 We have encountered commercial production to the south of
10 this area. We are moving to the north.

11 The Sand Tank 31 Number 1 on the extreme right of
12 the cross-section missed the sand. We tested an upper
13 Morrow sand for maybe 100 MCF a day and have abandoned it.
14 It could not sustain production.

15 The Sand Tank 6 Number 1 in the middle Morrow
16 actually encountered a wet sand, so we will not even
17 attempt that. That well is actually producing from the
18 lower Morrow.

19 We have completed the middle Morrow in the Sand
20 Tank 1 Number 1, which is approximately a mile southeast of
21 the Sand Tank 36 location, and the lower Morrow is
22 producing at a rate of about 6 million a day. When we shot
23 the middle morrow, we've got approximately 7 million a day.
24 So not a large increase.

25 The other producers in the area that are middle

1 Morrow are in the ranges of anywhere from half a BCF to 1
2 BCF. They're shown -- somewhat limited nature or small
3 areal extents on their reservoirs.

4 And then to the north, this Jackson Federal
5 Number 1 well, which is one mile northwest of the Sand Tank
6 36 location, did test a middle Morrow sand as
7 noncommercial. It also tested an Atoka interval as
8 noncommercial, a Strawn interval as noncommercial. They
9 finally actually made a Wolfcamp oil well that's
10 undesignated field right now.

11 And the last zone within the Morrow interval that
12 we would force-pool is the lower Morrow interval. So far,
13 we have found two producers, the Sand Tank 1 Fed 1 and the
14 6 Number 1. Each of those has indications.

15 We've got P-over-Z data on the Sand Tank 1 Number
16 1. It's indicated to be approximately 160 acres in size,
17 again limited. That is a point-bar system.

18 And then the Sand Tank 6 Number 1, based on the
19 decline rate, it looks like to be in the -- approximately
20 60 acres of size.

21 So again, we don't really anticipate -- If we do
22 stumble into that sand, that would be exactly what it is, a
23 stumbling into a lower Morrow sand.

24 Q. All right. Let's go now to Exhibit Number 8, the
25 lower Morrow structure isopach.

1 A. Exhibit Number 8 outlines the structure for you
2 on the lower Morrow. This structure generally holds on the
3 pays of the hole, and there's -- It's just pretty much
4 regional dip in the area.

5 Again, most of the sandbars, the Atoka and the
6 middle Morrow sandbars, are going to lie in somewhat on a
7 strike to the structure. The lower Morrow is a point-bar
8 system, it is going to be laid in as the stream moved down
9 the structure.

10 We've put the lower Morrow isopach, contoured in
11 the sand thicknesses, based on, again, the P-over-Z data
12 and the decline data on the two wells that have encountered
13 that particular reservoir, and again it shows you the
14 indicated limited areal extent of those sands.

15 Q. Let's go now to Exhibit 9 and look at the middle
16 Morrow structure.

17 A. Again, the middle Morrow is the primary
18 objective. Again, they are sandbars laying in along strike
19 of the structure.

20 We know that they are sandbars, partly because
21 the Sand Tank 6 Number 1 is a wet sand updip from the wells
22 one mile south in the same middle Morrow, which are gas-
23 productive. So we know there's separation from north to
24 south. And we anticipate that if we do encounter a middle
25 Morrow sand, it will be a completely different sandbar.

1 The risk that we see in this area for the middle
2 Morrow is that there has not been a commercial production
3 established to the north of the Sand Tank area. We are
4 moving towards wells that were drilled as dry holes in this
5 target.

6 There is low perm, permeability risk. There are
7 water -- Water has been found in these sands. That's one
8 of the risks. Or, of course, you can just completely miss
9 the sandbar when you drill it.

10 Q. What risk penalty do you recommend be assessed
11 against any owner that doesn't voluntarily join in the
12 well?

13 A. The maximum penalty of 200 percent.

14 Q. And that would be applicable to the Atoka and the
15 Strawn as well as the Morrow formation?

16 A. Yes.

17 Q. Can you identify Exhibit Number 10 for Mr.
18 Catanach?

19 A. Exhibit Number 10 is simply a summary of what
20 I've just testified to for the 320-acre spacing objectives.

21 It outlines what the geology, the expected EURs
22 of the wells to the south, also the reservoir size and
23 thicknesses, and then the multiple risks that are
24 associated with drilling the Sand Tank 36 Number 1
25 location.

1 Q. Does Enron seek to be designated operator of the
2 well?

3 A. Yes, we do.

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

8 A. Yes, it will.

9 Q. Were Exhibits 6 through 10 prepared by you or
10 compiled under your direction?

11 A. Yes, they were.

12 MR. CARR: At this time, Mr. Catanach, we would
13 move the admission into evidence of Enron Exhibits 6
14 through 10.

15 EXAMINER CATANACH: Exhibits 6 through 10 will be
16 admitted as evidence.

17 MR. CARR: And that concludes my direct
18 examination of Mr. Cate.

19 EXAMINATION

20 BY EXAMINER CATANACH:

21 Q. Just one question, Mr. Cate: Do you now if
22 there's any 80-acre pools in this area?

23 A. No, I don't believe there are at the time. We
24 will research that and submit in writing to you our
25 findings, and of course if we cannot find one within a

1 mile, then we will just dismiss that portion of it.

2 EXAMINER CATANACH: Okay, that's all I have.
3 Anything further, Mr. Carr?

4 MR. CARR: That's all I have in this case, Mr.
5 Catanach.

6 EXAMINER CATANACH: All right. There being
7 nothing further, Case 11,710 will be taken under
8 advisement.

9 (Thereupon, these proceedings were concluded at
10 11:33 a.m.)

11 * * *

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21 I do hereby certify that the foregoing is
22 a complete and correct transcript of the proceedings in
23 the examination hearing of Case No. 11,710,
held on March 23, 1977.

24 David J. Catanach, Examiner
25 Oil Conservation Division

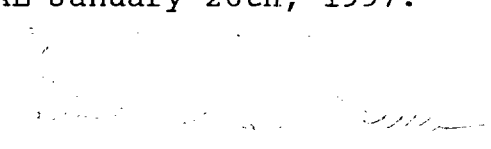
CERTIFICATE OF REPORTER

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 January 26th, 1997.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998