

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: ) CASE NO. 11,950  
APPLICATION OF ENRON OIL AND GAS COMPANY )  
FOR COMPULSORY POOLING, EDDY COUNTY, )  
NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

March 19th, 1998

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, March 19th, 1998, 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

March 19th, 1998  
Examiner Hearing  
CASE NO. 11,950

	PAGE
EXHIBITS	3
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>PATRICK J. TOWER</u> (Landman) Direct Examination by Mr. Carr	4
<u>RANDALL S. CATE</u> (Engineer) Direct Examination by Mr. Carr	12
REPORTER'S CERTIFICATE	20

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## E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	7	12
Exhibit 2	7	12
Exhibit 3	7	12
Exhibit 4	8	12
Exhibit 5	9	12
Exhibit 6	11	12
Exhibit 7	13	19
Exhibit 8	14	19
Exhibit 9	14	19
Exhibit 10	15	19
Exhibit 11	16	19
Exhibit 12	17	19

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## A P P E A R A N C E S

## FOR THE DIVISION:

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 Attorney at Law  
 Legal Counsel to the Division  
 2040 South Pacheco  
 Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

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

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 9:48 a.m.:

3 EXAMINER STOGNER: Hearing will come to order.  
4 At this time I will call Case Number 11,950.

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

12 EXAMINER STOGNER: Any other appearances?  
13 Will the witnesses please stand to be sworn?  
14 (Thereupon, the witnesses were sworn.)

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

18 DIRECT EXAMINATION

19 BY MR. CARR:

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

21 A. My name is Patrick J. Tower. I reside in  
22 Midland, Texas.

23 Q. By whom are you employed?

24 A. Enron Oil and Gas Company.

25 Q. And what is your position with Enron?

1 A. My title is project landman.

2 Q. Have you previously testified before this  
3 Division?

4 A. Yes, I have.

5 Q. At the time of that testimony, were your  
6 credentials as an expert in petroleum land matters accepted  
7 and made a matter of record?

8 A. Yes.

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

11 A. Yes, I am.

12 Q. And are you familiar with the status of the lands  
13 in the subject area?

14 A. Yes, I am.

15 MR. CARR: Are the witness's qualifications  
16 acceptable?

17 EXAMINER STOGNER: I believe they are.

18 Q. (By Mr. Carr) Mr. Tower, would you briefly state  
19 what Enron seeks in this case?

20 A. Enron is seeking an order pooling all the  
21 minerals from the surface to the base of the Chester  
22 formation underlying Lots 1, 2, 3 and 4 in the east half,  
23 west half, which is a west-half equivalent of Section 31,  
24 Township 17 South, Range 30 East, in Eddy County, New  
25 Mexico, forming a 310.56-acre spacing and proration unit

1 for all formations in pools developed on 320-acre spacing,  
2 which would include but not be limited to the Undesignated  
3 Sand Tank-Strawn Pool, Undesignated South Loco Hills-Morrow  
4 Gas Pool, the Undesignated Sand Tank-Atoka Pool, and the  
5 Undesignated Sand Tank-Morrow Gas Pool.

6 This odd size spacing unit is within the  
7 tolerance allowed by Rule 104.D.(2)(a).

8 Q. Mr. Tower, Enron owns all interests in the  
9 southwest quarter of section; is that correct?

10 A. Yes.

11 MR. CARR: Mr. Stogner, we would therefore  
12 request that the portions of this case which relate to  
13 compulsory pooling on 160 acres, 80 acres and 40 acres be  
14 dismissed.

15 EXAMINER STOGNER: I'll take note of that. Thank  
16 you.

17 Q. (By Mr. Carr) Mr. Tower, to what well will the  
18 well be dedicated?

19 A. To be Enron's Sand Tank 31 Fed Com Number 2 well,  
20 which is to be drilled at a previously approved unorthodox  
21 location of 990 feet from the south line and 1200 feet from  
22 the west line of said Section 31, with, again, the west-  
23 half spacing unit.

24 The original unorthodox was approved  
25 administratively under Division Order NSL-3932 on January

1 14th, 1998.

2 Q. Is a copy of that order what has been marked as  
3 Enron Exhibit Number 1?

4 A. Yes, Exhibit Number 1 is the OCD's approval.

5 Q. Would you identify what has been marked Enron  
6 Exhibit Number 2 and review it for Mr. Stogner?

7 A. Exhibit Number 2 is a land plat depicting, in the  
8 red outline, the spacing unit that I mentioned a minute ago  
9 for the well and the red dot representing the location of  
10 the well, and the general land ownership in the area.

11 Q. What are the primary objectives in the proposed  
12 well?

13 A. Primary objectives are the Morrow, the Chester,  
14 the Atoka, the Strawn and the Bone Spring formations, with  
15 the Morrow being the primary.

16 Q. What is Exhibit Number 3?

17 A. Exhibit Number 3 is a breakdown of the ownership,  
18 primarily the party being force pooled here, which is  
19 Anadarko Production Company. They have a working interest,  
20 approximately 40 percent. Enron remains the remaining  
21 working interest in this spacing unit.

22 Q. And so what percentage is actually voluntarily  
23 committed to the well?

24 A. Approximately 60 percent.

25 Q. Will you summarize the efforts you have made to

1 obtain the voluntary joinder of Anadarko in the proposed  
2 spacing and proration unit?

3 A. Yes, I will. If you will refer to Exhibit -- the  
4 next exhibit, which I believe is Exhibit Number 4, I have  
5 an itemization of all of the correspondence and/or  
6 negotiations with Anadarko. Attached to this exhibit are  
7 the various correspondence, well proposals, certifications,  
8 faxes, et cetera.

9 As you can see, there have been numerous. We  
10 started this project in November of 1997.

11 In summary, here in the last few days, my last  
12 bullet there, March 16th, we have tentatively arrived at an  
13 understanding with Anadarko that they are going to grant  
14 Enron a voluntary agreement.

15 However, at this point we have nothing in  
16 writing, and we are awaiting that. They have agreed to our  
17 right to proceed with the hearing.

18 The need for proceeding, we have a rig stacked in  
19 this immediate area that we have used out here and a  
20 particular rig crew that we would like to utilize, and  
21 therefore this rig is ready to move to this location within  
22 the next week or as soon as we can either hopefully reach a  
23 voluntary agreement, and/or, if not, finalize that, we'll  
24 go under the force pooling order to be granted, and  
25 Anadarko agreed to this.



1           We agreed as soon as a voluntary arrangement has  
2       been signed, we will dismiss this action.

3           If it's prior to the order being issued, we will  
4       immediately notify the Commission to dismiss the  
5       Application order -- or Application, pending hearing.

6           If it's subsequent to that, we will agree to  
7       dismiss the order at such time.

8           Q.    And, Mr. Tower, you will keep the Examiner  
9       advised of the status of the negotiations with Anadarko  
10      over the next --

11          A.    Yes, we will.

12          Q.    -- few days?

13                Have you made a good-faith effort to reach this  
14      effort with Anadarko?

15          A.    Yes, we have.

16          Q.    And you're going to be -- Have you proposed the  
17      well based on the AFE, which is marked as Exhibit 5?

18          A.    Yes, we have.

19          Q.    Would you review that for the Examiner?

20          A.    Exhibit 5 is our estimated well costs for an  
21      11,800-foot Morrow/Chester test. You will note the dryhole  
22      -- estimated dryhole cost is \$512,700. The estimated total  
23      completion well cost is \$866,200.

24          Q.    Are these costs in line with what is charged for  
25      similar wells in the area?

1 A. Yes, they are.

2 Q. And has Enron drilled other Morrow/Chester  
3 wells --

4 A. Yes, we've drilled --

5 Q. -- in the immediate area?

6 A. -- numerous in this area.

7 Q. Have you made an estimate of the overhead and  
8 administrative costs to be incurred while drilling the well  
9 and also while producing it, if it is successful?

10 A. Yes, I have.

11 Q. And what are those figures?

12 A. We are recommending to the Commission that the  
13 drilling well rate be \$5600 and the producing well rate be  
14 \$560.

15 Q. And how do these figures compare with the 1997  
16 Ernst and Young survey figures?

17 A. The drilling well rate is a little bit higher,  
18 and the producing well rate is a little bit lower.  
19 However, the recent Ernst and Young survey was generated in  
20 August, 1997. The costs, the drilling costs, have gone up  
21 in the interim, towards the end of that period. In fact --  
22 so...

23 Q. Have other operators tried to develop the Morrow  
24 and Chester on this particular tract?

25 A. Yes, in fact, Enron and Yates, two predominant

1 operators in the area, we have several joint operating  
2 agreements, several carry rates of \$5800 and \$580, as high  
3 as that.

4 We have a recent 1996 order in this same  
5 section -- it was a dryhole -- to the east under Case  
6 11,553, Order 10,618, where the Commission itself issued  
7 rates of \$5603 drilling and \$563 producing.

8 So, as you can see, they generally are in line  
9 with the accepted practices in the area.

10 Q. Do you recommend that the figures of \$560 a month  
11 and \$5600 a month be incorporated into the order that  
12 results from this hearing?

13 A. Yes.

14 Q. Is Enron Exhibit Number 6 an affidavit confirming  
15 that notice of this Application and hearing have been  
16 provided to Anadarko in accordance with OCD rules?

17 A. Yes.

18 Q. Will Enron call a technical witness to review the  
19 risk associated with the proposed well?

20 A. Yes.

21 Q. Were Exhibits 1 through 6 either prepared by you  
22 or compiled under your direction?

23 A. Yes, they were.

24 MR. CARR: At this time, Mr. Stogner, we would  
25 move the admission into evidence of Enron Exhibits 1

1 through 6.

2 EXAMINER STOGNER: Exhibits 1 through 6 will be  
3 admitted into evidence at this time.

4 MR. CARR: And that concludes my direct  
5 examination of Mr. Tower.

6 EXAMINER STOGNER: I have no questions. Any  
7 questions of Mr. Tower?

8 You may be excused.

9 MR. CARR: At this time we would call Randy Cate.

10 RANDALL S. CATE,

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

13 DIRECT EXAMINATION

14 BY MR. CARR:

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

16 A. My name is Randall Cate.

17 Q. And where do you reside?

18 A. In Midland, Texas.

19 Q. By whom are you employed?

20 A. Enron Oil and Gas Company.

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

22 A. Project reservoir engineer.

23 Q. Mr. Cate, have you previously testified before  
24 this Division and had your credentials as an expert in  
25 petroleum engineering accepted and made a matter of record?

1 A. Yes, I have.

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

4 A. Yes, I am.

5 Q. Have you made a technical study of the area  
6 surrounding the proposed well?

7 A. Yes, I have.

8 Q. Are you prepared to share the results of that  
9 study with Mr. Stogner?

10 A. Yes.

11 MR. CARR: Are the witness's qualifications  
12 acceptable?

13 EXAMINER STOGNER: Yes, Mr. Cate is so qualified.

14 THE WITNESS: Thank you.

15 Q. (By Mr. Carr) Mr. Cate, would you please refer  
16 to what has been marked for identification as Enron Exhibit  
17 Number 7 and review that for Mr. Stogner?

18 A. Yes, Enron Exhibit Number 7 is a lower Morrow  
19 structure map for the area of interest. In the red-shaded  
20 area, the west half of Section 31, in the center of the  
21 plat, in the location shown there, the Sand Tank 31 Fed Com  
22 1.

23 And the lower Morrow marker is a consistent  
24 marker throughout this area. There is really nothing  
25 significant in the structure. We do see kind of a broad

1 nose in the area, the location that we'll drill the well.

2 A couple of things to note.

3 Downdip in Section 6, the Sand Tank 6 Fed Com  
4 Number 1, which is in the east half, has tested the lower  
5 Morrow. Substantial amounts of water, approximately 36,000  
6 barrels of water there. And the middle Morrow, which is  
7 the primary target of the proposed location, was completely  
8 wet, tested wet.

9 Other than that, there's really not much more  
10 significance there.

11 Q. Let's go to Exhibit Number 8, the net isopach on  
12 the middle Morrow "B" sand.

13 A. Yes, Exhibit Number 8 is a net sand, based on a  
14 50-unit cutoff on the gamma ray, for the middle Morrow,  
15 what we consider the "B" sand, and we'll refer to that on  
16 the cross-sections that are designated by the traces, A-A'  
17 and B-B'.

18 The significance is that the middle Morrow  
19 sand -- we see it as a shoreline sandbar, very narrow in  
20 nature, approximately half a mile wide, and long and linear  
21 in nature.

22 Q. All right, let's go to the production map,  
23 Exhibit Number 9.

24 A. Exhibit Number 9 is a cum production map through  
25 January of 1998.

1           The significance, it shows areally a depiction of  
2 the production out of the zones that we are asking for  
3 force pooling approval on.

4           I'll talk a little bit about the distinction  
5 about the lower Morrow and the middle Morrow as we get to  
6 the cross-sections.

7           The sand Tank "1" 1, down in -- approximately .75  
8 miles southwest of the 31 location, is the only commercial  
9 middle Morrow well, and that was referred to on the  
10 previous exhibit that this is the reservoir that we are  
11 attempting to encounter with our 31 Number 2 location.

12           Otherwise, we do have Atoka in the area, as  
13 designated by the green. There's a small chance of  
14 encountering that. It's not commercial in this Sand Tank 6  
15 well, but we do want to include that in the order. It's a  
16 gas reservoir.

17           And also, to the southeast, approximately 1.5  
18 miles, there is Strawn production. One of the wells in the  
19 south half of Section 5 would be considered commercial. We  
20 do not necessarily anticipate it at this location and have  
21 not prepared maps for you on that.

22           Q.   Let's go to the cross-section, A-A', marked  
23 Exhibit 10. Would you review that for Mr. Stogner?

24           A.   Cross-section A-A' is a dip trace across the  
25 Cerritos APT Fed Com Number 1, which is in Section 1, to

1 the southwest of the location.

2 The center well is the Sand Tank "1" 1, of which  
3 the middle Morrow sand, shown in red, is the reservoir that  
4 we have mapped and the reservoir we're trying to encounter  
5 with the 31-1 location.

6 And then the far right well is the Cerros Locos  
7 AQM.

8 The significance here is that in the Sand Tank 1  
9 Fed 1, we did encounter approximately 30 feet of the "B"  
10 sand, and yet in the wells on either side that are half a  
11 mile away or less, the sand is virtually gone and  
12 noncommercial.

13 Q. Let's go to the B-B' cross-section, Exhibit 11.

14 A. Cross-section B-B' is a strike line that -- the  
15 primary significance is, it has the Sand Tank 31 Number 1  
16 well log shown. It's the log in the center, and it is the  
17 closest offset to the 31 Number 2 location, the  
18 significance being that it encountered no middle Morrow or  
19 lower Morrow.

20 We are offsetting this well, which was a dryhole.  
21 Otherwise, the middle Morrow sand does show up over in the  
22 Sand Tank "1" 1 to the left.

23 About two miles to the northeast is the well log  
24 on the right. Has some sand in the interval of the middle  
25 Morrow, but it was tested as noncommercial.



1           The other thing that the previous cross-section  
2 did show, there were some tests in the area on the Chester,  
3 and we are force pooling for that interval. The Chester is  
4 below the Morrow, but there were no commercial tests, no  
5 production established in the Chester in this immediate  
6 area.

7           Q.    Let's go to Exhibit Number 12, and I'd ask you to  
8 use that exhibit to summarize the conclusions you have  
9 reached from your study of the area.

10          A.    Exhibit Number 12 is a summary of the potential  
11 pay formations and the risks that we've talked about.  
12 Again, our primary pay target is the middle Morrow sand.  
13 It's a gas reservoir. Just one commercial well in the  
14 area, and several noncommercial wells to the west, to the  
15 east, the south and to the northeast.

16                It trends in a narrow bar southwest to northeast.  
17 It's tested wet within close proximity downdip.

18                Secondary pay targets that we are including in  
19 the Application, the Chester carbonate. Nearest commercial  
20 production, one and a half miles south. It has been tested  
21 closer than that, noncommercial.

22                The lower Morrow sands, there is commercial  
23 production in the area. It's highly variable point bars.  
24 We did not map it. You don't really expect it at this  
25 location. And there is high water production established

1 in it to the southeast.

2 The Atoka sands also with gas, no commercial  
3 production. And the Strawn carbonate, almost two miles  
4 before you get to commercial production.

5 Q. Are you prepared to make a recommendation to the  
6 Examiner concerning the risk penalty that should be  
7 assessed Anadarko if they do not participate in the well?

8 A. Yes, based on the risks of the pays that we've  
9 talked about, the 200-percent penalty is appropriate.

10 Q. In your opinion, you could drill a noncommercial  
11 well at this location?

12 A. Yes, there's a substantial risk that we could  
13 drill a noncommercial well.

14 Q. Does Enron seek to be designated operator of the  
15 proposed well?

16 A. Yes.

17 Q. In your opinion, will granting of this  
18 Application and the drilling of the proposed well be in the  
19 best interests of conservation, the prevention of waste and  
20 the protection of correlative rights?

21 A. Yes, it will.

22 Q. Were Exhibits 7 through 12 prepared by you or  
23 compiled under your direction?

24 A. Yes, they were.

25 MR. CARR: At this time, Mr. Stogner, we would

1 move the admission into evidence of Enron Exhibits 7  
2 through 12.

3 EXAMINER STOGNER: Exhibits 7 through 12 will be  
4 admitted into evidence.

5 MR. CARR: And that concludes my direct  
6 examination of Mr. Cate.

7 EXAMINER STOGNER: I have no questions of this  
8 witness.

9 THE WITNESS: Thank you.

10 MR. CARR: We have nothing further in this case.  
11 We will keep you advised about the status of our  
12 negotiations with Anadarko.

13 EXAMINER STOGNER: With that, you may be excused.  
14 And we'll take Case Number 11,950 under  
15 advisement at this time.

16 (Thereupon, these proceedings were concluded at  
17 10:08 a.m.)

18 \* \* \*

19  
20 I do hereby certify that the foregoing is  
21 a complete record of the proceedings in  
22 the Examiner hearing of Case No. 11950,  
23 heard by me on 19 March 1948.

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 March 21st, 1998.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998