

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. 11,795  
)  
APPLICATION OF ENRON OIL AND GAS COMPANY )  
FOR COMPULSORY POOLING AND UNORTHODOX )  
WELL LOCATION, LEA COUNTY, NEW MEXICO )  
\_\_\_\_\_ )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 12th, 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, June 12th, 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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June 12th, 1997  
Examiner Hearing  
CASE NO. 11,795

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

## FOR THE DIVISION:

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## FOR THE APPLICANT:

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

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   9:40 a.m.:

3           EXAMINER CATANACH: Call the hearing back to  
4   order, and I'll call Case 11,795, which is the Application  
5   of Enron Oil and Gas Company for compulsory pooling and  
6   unorthodox well location, Lea County, New Mexico.

7           Call for appearances in this case.

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  
11   Company, and I have two witnesses.

12          EXAMINER CATANACH: Will the witnesses please  
13   stand to be sworn in?

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. Will you state your name for the record, please?

21           A. Patrick J. Tower.

22           Q. Where do you reside?

23           A. Midland, Texas.

24           Q. By whom are you employed?

25           A. Enron Oil and Gas Company.

1 Q. What is your position with Enron?

2 A. I'm a project landman.

3 Q. Mr. Tower, have you previously testified before  
4 the New Mexico Oil Conservation Division?

5 A. Yes, I have.

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

9 A. Yes.

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

12 A. Yes, I am.

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

15 A. Yes, I am.

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

18 EXAMINER CATANACH: They are.

19 Q. (By Mr. Carr) Mr. Tower, would you briefly  
20 summarize for Mr. Catanach what it is Enron seeks with this  
21 Application?

22 A. Enron seeks an order pooling all mineral  
23 interests from the surface to the base of the Morrow  
24 formation for the following spacing units -- excuse me, to  
25 the base of the Devonian under the following spacing units

1 in the east half of Section 7, Township 24 South, Range 34  
2 East: In the east half for formations developed on 320-  
3 acre spacing, including the South Bell Lake-Morrow Gas  
4 Pool; the southeast quarter for all formations developed on  
5 160-acre spacing, including the Bell Lake-Devonian Gas  
6 Pool; and the northwest quarter of the southeast quarter  
7 for all formations developed on 40-acre spacing.

8 Q. And to what well do you propose to dedicate these  
9 spacing units?

10 A. Enron's Bell Lake Unit 7 Well Number 1.

11 Q. And will that well be drilled at an unorthodox  
12 location?

13 A. It will be drilled at an unorthodox for the  
14 Devonian, however legal for the Morrow. And the unorthodox  
15 location for the Devonian is located 2276 feet from the  
16 south and 1863 feet from the east in Unit J of Section 7.

17 Q. Now, this well is unorthodox because it is too  
18 close to an interior boundary; isn't that correct?

19 A. On the 160, it is actually the -- Yes, the  
20 centerline of the dividing -- of the section, yes.

21 Q. The owners are --

22 A. Actually, it would be the --

23 Q. You have the same owners throughout the east half  
24 of section, do you not?

25 A. That is correct.

1 Q. And the only thing is that you may have some  
2 varying percentages, depending upon which formation you  
3 actually --

4 A. This is correct.

5 Q. Mr. Tower, Enron has previously pooled the east  
6 half of this section, has it not?

7 A. Yes.

8 Q. And when did that occur?

9 A. It occurred in April of 1996, under Case Number  
10 11,494, with the resulting Order Number R-10,575.

11 Q. And that order has expired --

12 A. Yes.

13 Q. -- has it not?

14 A. Yes.

15 Q. And we're back here today with a new case. How  
16 does this case differ from what we sought in April of last  
17 year?

18 A. In essence, Enron developed a new location based  
19 on some reprocessed seismic data, and so the location moved  
20 slightly. And in addition we have decided go ahead and  
21 take the well to the deeper zone, take it on down to look  
22 at the Devonian instead of just the Morrow, which was  
23 previously the subject of the pooling.

24 Q. Let's go to what's been marked as Exhibit Number  
25 1. Will you identify and review that, please?

1           A.   Exhibit Number 1 is a land map. In red  
2 identifies the 320-acre proration unit allocated to this  
3 well. For the Morrow again, the southeast quarter,  
4 although it's not marked, would be the allocation for the  
5 Devonian.

6           The location of the well is shown by the shaded  
7 dot in the northwest of the southeast quarter, and it in  
8 general shows the ownership in the area.

9           Q.   And what is the primary objective?

10          A.   The Morrow formation.

11          Q.   Are there secondary objectives in the well?

12          A.   Yes, the Devonian and the Atoka.

13          Q.   What percentage of the acreage in these spacing  
14 units has been voluntarily committed to the well?

15          A.   91 percent as to the formations down to the  
16 Morrow and 82 percent inasfar as the Devonian.

17          Q.   Let's go to Exhibit Number 2. Would you identify  
18 that?

19          A.   Exhibit Number 2 is a breakdown of the parties  
20 we're seeking compulsory pooling against. There are  
21 primarily two parties, the first one being Southland  
22 Royalty Company. Also, it's changed it's name, Meridian  
23 and Burlington. You'll notice on the correspondence they  
24 have had some name changes. So it started out in  
25 Southland's name, and all entities now are in the



1 Burlington Resources.

2 And then also the Lucille and Willie Joe Holland.  
3 And on this plat breaks out the east half -- It reflects  
4 their ownership if you had an east-half spacing unit for  
5 the Morrow, and then in a separate column it reflects their  
6 ownership as to the southeast quarter, which would be  
7 allocated to the Devonian. In essence, in the 320 acres,  
8 roughly 9 percent among the two parties, and in the  
9 Devonian roughly 17, 18 percent.

10 Q. Mr. Tower, in the last couple of days several  
11 people have contacted Enron concerning the interests of the  
12 Sims family in the east half of Section 7. Does the Sims  
13 family have an interest which is going to be subject to  
14 compulsory pooling?

15 A. No, they do not.

16 Q. Originally, contacts were made with these  
17 individuals based on a preliminary title review; is that  
18 not right?

19 A. Yes.

20 Q. The Sims family has previously conveyed their  
21 interest in this acreage to someone else?

22 A. Yes, their interest, as we found out after the  
23 fact with our title, had originally been leased and  
24 committed to the unit which is owned by other parties.

25 Q. And those parties have voluntary -- are

1 voluntarily --

2 A. Yes --

3 Q. -- in the well?

4 A. -- that is correct.

5 Q. And so to be certain that it's clear, we are not  
6 seeking an order pooling interests owned by any of the Sims  
7 family?

8 A. That is correct.

9 Q. With whom have you reached an agreement to date  
10 for the development of this acreage?

11 A. There have been numerous parties, but the primary  
12 principals, Kaiser-Francis Oil Company and the Bass  
13 entities, there are several Bass Enterprises Production  
14 Company entities that -- among some smaller owners. But  
15 primarily those two. Kaiser is the current operator of  
16 this South Bell Lake Unit at this time.

17 Q. But the only interests that will be subject to  
18 pooling are those parties identified on Exhibit 2?

19 A. That is correct.

20 Q. Let's go to Exhibit Number 3. Would you identify  
21 that, please?

22 A. Exhibit Number 3 is an AFE giving the estimated  
23 well costs for a 16,200-foot Devonian test. The estimated  
24 dryhole cost is rounded off, \$1.3 million. The total  
25 completed well cost is estimated at \$1.8 million.

1 Q. And this AFE has been approved by the interest  
2 owners who are voluntarily participating in the project?

3 A. Yes.

4 Q. Let's go back to the interest owners who are  
5 going to be subject to pooling, and I would first like you  
6 to address the interests held by Lucille and Willie  
7 Holland, and in so doing would you refer to Exhibit Number  
8 4?

9 A. Yes. Lucille and Willie Joe Holland are parties  
10 that we have not been able to locate. They also --  
11 Testimony was presented and accepted in a previous case  
12 that is now expired, or the order is expired.

13 On Exhibit Number 4 is a letter from Jim R.  
14 McMichael, who is an independent landman that Enron hired  
15 to further try and locate these parties, and it will  
16 summarize the efforts he's made. In essence, Enron has had  
17 its title attorney conduct a title search.

18 We've also gone out independently and researched  
19 the Lea County records, the grantor-grantee indexes,  
20 through reviewing some of the abstracts chased a lead to  
21 some of their heirs to Eastland, Texas, pursued that lead,  
22 contacted -- went through all the phone directories, trying  
23 to locate any Hollands in those areas, could not locate  
24 any. So we have, in essence, reached an impasse of finding  
25 these parties.

1 Q. And these interest owners were pooled last year?

2 A. They were pooled last year at the same time, yes.

3 Q. All right. What is the status of the  
4 negotiations with the Southland Royalty/Burlington  
5 Resources Oil and Gas interest in the tract?

6 A. We have been working with Burlington since  
7 September of 1996 in conjunction with this well. Their  
8 interest that we itemized on Exhibit 2, there is a title  
9 question of whether or not they even own it. It's a  
10 mineral interest. And if they do not own it, then the  
11 other parties who voluntarily committed the well, it may  
12 require quiet title if the well is successful.

13 So because of that, there's been numerous  
14 discussions trying to ascertain what the options were, and  
15 Enron's trying to just enter in trades on both sides.

16 We have been attempting to work this out. We had  
17 a meeting with Don Davis, one of the managers at  
18 Burlington, on June 12 -- or we had discussions with him.  
19 We actually had a meeting with some of his staff the day  
20 before, or on the 12th, and then a conversation with Mr.  
21 Davis on the 13th.

22 In the essence of trying to work this out,  
23 Burlington has indicated that they need a little more time  
24 and hope to have some type of waiver and/or voluntary  
25 agreement within a week.

1           However, to accommodate that and give them the  
2     time, primarily trying to resolve the title question some,  
3     whether -- you know, the interests, we have agreed, for the  
4     sake of trying to do that, to keep the record open until  
5     the next docket in an effort to -- what we anticipate will  
6     be a voluntary agreement, at which point we will dismiss  
7     Burlington's interest.

8           Q.    Mr. Tower, you've been working with Burlington on  
9     this matter since September of 1996; is that right?

10          A.    That is correct.

11          Q.    And the reason that you're asking that the case  
12     even be continued or the record left open for two weeks is  
13     to afford to Burlington's land department an opportunity to  
14     resolve this internally and with you, without first having  
15     us go to the OCD and just proving the interest?

16          A.    That is correct.

17          Q.    They've asked us to do that?

18          A.    Yes.

19          Q.    And we're in agreement with that?

20          A.    Yes, we are.

21          Q.    In your opinion, have you made a good-faith  
22     effort to locate and identify all individuals in the east  
23     half of 7 and obtain their voluntary participation in the  
24     project?

25          A.    Yes, I have. And I will add, the additional

1 correspondence on Exhibit 4 are various dealings with  
2 Burlington and Southland Royalty and Meridian, a/k/a.

3 Q. Has Enron drilled other Devonian wells in this  
4 immediate area?

5 A. No.

6 Q. There have been no recent Devonian wells in the  
7 area; is that not fair to say?

8 A. That is fair to say.

9 Q. Is Exhibit Number 5 an affidavit with attached  
10 letters confirming that notice of this Application has been  
11 provided to the interest owners in this acreage in  
12 accordance with OCD rules?

13 A. Yes, it is.

14 Q. Have you made an estimate of the overhead and  
15 administrative costs to be incurred while drilling this  
16 well and also while producing it, if it is successful?

17 A. Yes, the rates that Enron is utilizing, per the  
18 previous hearing and in voluntary agreement, are \$5800  
19 drilling well rate and a \$580-a-month producing well rate.

20 Q. These are lower than the Ernst and Young survey  
21 figures for wells of this depth in this area?

22 A. For the Devonian, that is correct. We are --  
23 Again, primary is Morrow and we just stay with those rates.

24 Q. And you're using these same figures that were  
25 approved in Order 10,575?

1 A. that is correct.

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

4 A. Yes, we do.

5 Q. Were Exhibits 1 through 5 prepared by you or  
6 compiled under your direction?

7 A. Yes, they were.

8 MR. CARR: At this time, Mr. Catanach, we move  
9 the admission into evidence of Enron Exhibits 1 through 5.

10 EXAMINER CATANACH: Exhibits 1 through 5 will be  
11 admitted as evidence.

12 MR. CARR: And that concludes my direct  
13 examination of Mr. Tower.

14 EXAMINATION

15 BY EXAMINER CATANACH:

16 Q. Mr. Tower, within the next two weeks Burlington  
17 is going to try and resolve whether or not they do own the  
18 interest; is that --

19 A. Not only whether -- I'm not sure if they'll be  
20 able to resolve whether they own it. They'll have to take  
21 a business-risk decis- -- assess the risk of whether they  
22 -- you know, there's a chance they will own it.

23 But also primarily to enter into a trade with  
24 Enron, either to join the well or sell their interest or  
25 whatever. We have presented some options so they don't

1 have to deal with the title problem if they don't want to,  
2 and we'll assume that interest.

3 So it will be an assumption on their part that  
4 they will assume the interest for the drilling of the well.  
5 That matter may not be resolved until the quiet-title suit  
6 takes place. It stems on a 1952 lease and goes back. It's  
7 pretty complicated as far as the title. It may take a  
8 court to resolve it.

9 Q. There are no other interest owners who were  
10 involved in that Burlington title dispute?

11 A. Yes, there are. However, we have reached  
12 agreement with them to assume that interest and bear that  
13 risk.

14 Q. Okay. Outside of the interest owners within this  
15 proration unit, there are no other interest owners, outside  
16 of the ones that are participating in this?

17 A. Oh, no.

18 Q. Okay.

19 A. If I understood the question, I believe it's no.

20 Q. So a two-week continuance, is that going to --

21 MR. CARR: I think, Mr. Catanach, if we could  
22 continue for two weeks, that would give Burlington the time  
23 they have requested to get this resolved.

24 And if they -- we reach some sort of an agreement  
25 with them, we'll immediately advise you.



1           If not, at that time they understand we're going  
2 to go forward, we need to go forward.

3           EXAMINER CATANACH: So the case will be taken  
4 under advisement at that time?

5           MR. CARR: Yes, sir, unless they're -- And we  
6 will just advise you what the status is. They don't want  
7 to be force-pooled if they can work this out internally,  
8 and their land department would like not to have a force-  
9 pooling order entered when they think they may be able to  
10 simply resolve it.

11           THE WITNESS: They have -- If I may, they have  
12 indicated within a week they hope to commit this interest  
13 to Enron in some fashion, so we do not have to pool it.

14           EXAMINER CATANACH: Okay. And you will appear on  
15 June 26th and let us know what's going on?

16           MR. CARR: Mr. Owen will appear June the 26 and  
17 let you know.

18           EXAMINER CATANACH: Okay.

19           Q. (By Examiner Catanach) The well, the previous  
20 well, was never drilled, the subject of Case 11,494, right?

21           A. That is correct.

22           Q. All right. This is within an exploratory unit?

23           A. This is in the old -- I believe it was an  
24 exploratory unit formed in 1953. It's since contracted or  
25 just been down.

1           In this southern area it is a nine-section area.  
2       However, not all of the interests -- In fact, our drill  
3       site is on a fee tract that fell out of the unit, so our --  
4       a lot of the interests are not committed to the unit. A  
5       portion of the interests are committed to the unit, so --  
6       and those parties have committed.

7           But yes, it is an old unit. South Bell Lake  
8       formed in 1953, and in this particular area the South Bell  
9       Lake portion is in a nine-section block with a portion of  
10      these tracts having fallen out.

11           Q.    Isn't Kaiser-Francis's unit also here?

12           A.    They are a suboperator. They purchased this  
13      Southern Bell Lake Unit from Conoco, and there is a  
14      Northern Bell Lake Unit some six miles north, which I  
15      believe Conoco is still the operator.

16                   But for all practical purposes under its  
17      designation of suboperator, Kaiser is the operator of this  
18      southern area. Conoco no longer has an interest in it.

19                   However, as I pointed out, the well is not on a  
20      unit tract. It will be communitized with a unit tract.  
21      And Kaiser is in full agreement with all that.

22           Q.    And you can assume -- You'd be a suboperator to  
23      Kaiser?

24           A.    Yes. And again, within -- The tract we're  
25      drilling on is not subject to that unit agreement.

1 Q. Do you know, Mr. Tower, what the order of  
2 development of these formations would be? Would the  
3 Devonian be developed first?

4 A. Yes, and again, I may defer some of that  
5 testimony to the geologic witness to get into the  
6 complexities, but I believe that is our plan, to initially  
7 develop the Devonian and then come up the hole.

8 EXAMINER CATANACH: I have nothing further. This  
9 witness may be excused.

10 MR. CARR: At this time we call Mr. Zinz.

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

14 DIRECT EXAMINATION

15 BY MR. CARR:

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

17 A. Barry L. Zinz.

18 Q. Where do you reside?

19 A. Midland, Texas.

20 Q. By whom are you employed?

21 A. With Enron Oil and Gas Company.

22 Q. What is your position with Enron?

23 A. I'm division geological specialist.

24 Q. Mr. Zinz, have you previously testified before  
25 this Division and had your credentials as an expert in

1 petroleum geology accepted and made a matter of record?

2 A. Yes, I have.

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

5 A. I am.

6 Q. Have you made a geological study of the area that  
7 is the subject of this Application?

8 A. I have.

9 Q. And are you prepared to share the results of that  
10 study with Mr. Catanach?

11 A. I'm prepared.

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

14 EXAMINER CATANACH: Yes, they are.

15 Q. (By Mr. Carr) Mr. Zinz, let's go to what has  
16 been marked for identification as Enron Exhibit Number 6,  
17 the cross-section that you put on the wall.

18 A. Right.

19 Q. Would you review the information on that exhibit  
20 for the Examiner?

21 A. You bet. This is cross-section A-A', which is  
22 Exhibit 6. It runs from the Superior Government L well,  
23 located on the right here, now operated by Enron Oil and  
24 Gas, to the Continental Bell Lake Unit Number 4, which is  
25 now operated by Kaiser-Francis, on the left.

1           The cross-section identifies the three potential  
2 deep gas zone in the prospective area, those being the  
3 Devonian, the deepest, the Morrow zones, located here, and  
4 then the Atoka reef at this stratigraphic interval.

5           And the cross-section also illustrates the  
6 structural relationship Enron's proposed Bell Lake Unit 7  
7 Number 1 well has with these potential producing zones.

8           As stated earlier, the Morrow sands are the  
9 primary objective here, specifically the Morrow C sand.  
10 And it is productive in the Government L well here, out of  
11 this zone right here.

12           The Morrow D, which is not productive on either  
13 of these new wells, is also productive in the area, though,  
14 in that it is a potential.

15           The Atoka reef and the Devonian are both  
16 productive in the Government -- or, excuse me, in the Bell  
17 Lake Unit 4 well, and they're productive as a result of  
18 being on an upstructural, a closural, upthrown fault block,  
19 okay?

20           We've identified a much lower relief feature at  
21 our prospect, and the proposed well, we'll test that  
22 Devonian feature. That's what we're shooting for here.

23           We'll be moving updip from this Government L well  
24 at this location, approximately 200 feet. The Devonian was  
25 wet in this well, tested wet, production tested wet.

1           And the Atoka reef has yet to be tested, but  
2           we've had absolutely no shows in it, and it's not -- it  
3           doesn't calculate productive, based on a log calculation.  
4           Okay?

5           I believe --

6           Q.    When you drill the subject well, is it your  
7           intention to first produce the Devonian, if you're able to  
8           make a well there, and then come up the hole?

9           A.    Yes, we will start at the bottom and work our way  
10          up.

11          Q.    Let's go to your next exhibit, Exhibit Number 7,  
12          the production map. Could you review that for Mr.  
13          Catanach?

14          A.    You bet. This is a cum production map of the  
15          immediate area of the prospect, and it's color-coded by  
16          producing formations. You can see the producing zones are  
17          mainly those that I just talked about off the cross-  
18          section. We've got Devonian, Morrow -- broken down into  
19          Morrow C and D -- Atoka, and then some shallow Bone Spring  
20          production, oil production, located up in the north part of  
21          the mapped area.

22                The Government L well, which is on the cross-  
23          section, is located there to the south in Section 18, and  
24          it's produced 5.4 BCF of gas out of the Morrow C. It's  
25          colored red there.

1           And then the Bell Lake Unit is also on the cross-  
2 section, the Number 4. It's up in Section 6 to the north  
3 there, and a very prolific well, produced 13.7 BCF out of  
4 the Devonian and 13.6 out of that Atoka zone.

5           You might kind of keep that handy, because we  
6 might want to refer back to it.

7           Q. All right. Let's go to your first structure map,  
8 the Morrow C zone, marked Enron Exhibit Number 8.

9           A. Okay.

10          Q. Now, this is the structure map that was presented  
11 in the hearing last year, is it not, Mr. Zinz?

12          A. Yes, that's correct.

13          Q. All right. Would you review it for Mr. Catanach?

14          A. This is the Morrow C structure map that we  
15 presented last year when we pooled the Morrow, and this map  
16 is -- has a contour interval of 50 feet. The red dot there  
17 shows the original location for the Morrow pooling last  
18 year. You can see it's a little to the north of our  
19 current location.

20                 This map incorporates seismic data, had  
21 incorporated seismic data in the construction of the map.

22          Q. Let's go to Exhibit Number 9, your second Morrow  
23 C sand structure map.

24          A. As a comparison, this map, also done on the top  
25 of the Morrow C, has a contour interval of 100 feet.

1 Again, I've indicated where the original location was,  
2 also, on this map. And it is the result of incorporating  
3 reprocessed seismic data with the subsurface.

4 After this data was reprocessed and reworked, we  
5 saw this additional fault. If you compare the two maps,  
6 you see the initial fault we had, the one fault we had on  
7 the 1996 version, and now the -- with the reprocessed  
8 seismic worked in, we saw another fault. And therefore we  
9 moved our well to the upthrown side of that fault, to the  
10 south a little bit.

11 And it was basically this reprocessed data and  
12 looking at it with regard to the deep, which we generated  
13 our Devonian prospect, which was not included in the  
14 original pooling.

15 Q. Let's go to your Exhibit Number 10, your Devonian  
16 structure map.

17 A. The Devonian, again, it kind of mirrors what you  
18 see there on that Exhibit 9 for the Morrow C, although the  
19 structures are more pronounced, there's a lot more relief  
20 at the greater depth.

21 As I stated earlier, the Government L well  
22 produced water on production tests in the Devonian, and we  
23 think we're going to be roughly 200 feet high to that well.  
24 If you draw an estimated gas-water contact -- let's just  
25 say it's at the 12,200 subsea -- then you're kind of



1 isolating your closure up against that fault in the  
2 southeast corner of that Section 7 there.

3 Q. How would you evaluate the risk associated with  
4 the development of the Devonian?

5 A. With that well down to the south wet, and with  
6 such a low relief feature that we have here, it's going to  
7 be pretty risky. We only show about 200 foot of throw on  
8 that fault. And if that fault's not there, well, then,  
9 we're not going to make a well.

10 Q. Let's go to Exhibit 11, the Morrow C isopach.

11 A. As stated earlier also, the C sand was the  
12 primary objective, still is the primary objective. And  
13 we'll be moving updip from this Government L well. We have  
14 this sand channel trending more or less north-south.

15 There is a well up all the way to the top of the  
16 mapped area up there. It shows eight feet of porosity over  
17 20 feet of net sand. And by the way, this is a porosity  
18 isopach map, okay? Which makes the trend more or less  
19 north-south through this area.

20 The well in the northeast quarter of Section 7 is  
21 a plugged out well, and it produced a small amount of gas  
22 out of the C sand, not quite a half a B, and I think 491  
23 million out of that.

24 At this present location, we moved it to be,  
25 again, on the updip -- or the upthrown side of this fault

1 we now have interpreted.

2 Originally, our location was in that northeast  
3 quarter. Because of drainage we had moved it up there and  
4 wanted to be as far away from that Government L well -- or  
5 those -- actually, the two wells in Section 18, because  
6 both of them did produce from -- do or did produce from the  
7 Morrow C.

8 So because of drainage, we want to stay as far  
9 away from that well in Section 18, and yet not jeopardize  
10 ourselves with that fault. And because of that, we're  
11 unorthodox for the Devonian. We're legal for the Morrow,  
12 but it makes us unorthodox for the Devonian.

13 Q. Let's go now to Exhibit Number 12, your Morrow D  
14 isopach.

15 A. The Morrow D also produces in the area. The  
16 trend that I've drawn through here by well control comes  
17 down from the two wells in Section 5, which have fairly  
18 thick net and -- net porosity over net sand. Comes through  
19 the well in the northeast quarter, which was wet in the  
20 Morrow D sand. We will be fault-separated from that well  
21 at our current location. And it goes down through the Sims  
22 well located there in section 13.

23 Now, these two wells up in Section 5 up there, if  
24 you look at your production map, both wells combined has  
25 pooled like 38 BCF out of that sand, very prolific. I

1 believe both those wells are actually plugged out now.

2 And if you look at on the production map, for the  
3 Sims well down in Section 13, the southwest end of the  
4 channel, that well only has five feet of porosity, and it's  
5 only produced 650 million out of that sand.

6 So there again, we want to try to catch this sand  
7 right in the thickest part of the channel, and if we move  
8 any further to the south, which would be orthodox for the  
9 Devonian, it jeopardizes getting into the thickest part.

10 So this is another reason why we're unorthodox  
11 for the Devonian. We're trying to pick up the thickest  
12 part of this sand and stay on the upthrown side of that  
13 indicated fault.

14 Q. Is there risk associated with developing the  
15 Morrow as you're proposing?

16 A. Yes, there is. The Morrow does produce -- The  
17 actual Morrow D sand does produce on the downthrown side of  
18 the fault in this well over here in Section 20 and, as I  
19 just mentioned, in 13. But these trends are pretty  
20 elusive, and this is just my interpretation.

21 So it's very, very risky.

22 Q. What about the Atoka? I believe you said the  
23 Atoka was what? The Government L?

24 A. The Atoka had no shows, and based on the logs it  
25 doesn't appear to be productive.

1 Q. Are you prepared to make a recommendation to the  
2 Examiner concerning the risk to be assessed against any  
3 interest which is not voluntarily committed to the well?

4 A. I am.

5 Q. And what is that risk penalty?

6 A. Two hundred percent.

7 Q. Do you believe there's a chance you could drill a  
8 well at the proposed location that would not be a  
9 commercial success?

10 A. I believe if that fault isn't there, we're in  
11 trouble.

12 Q. Does Enron seek to be designated operator of the  
13 well?

14 A. Yes.

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

19 A. I do.

20 Q. Were Exhibits 6 through 12 prepared by you?

21 A. Yes, they were.

22 MR. CARR: At this time, Mr. Catanach, we would  
23 move the admission into evidence of Enron Exhibits 6  
24 through 12.

25 EXAMINER CATANACH: Exhibits 6 through 12 will be

1 admitted as evidence.

2 MR. CARR: That concludes my direct examination  
3 of Mr. Zinz.

4 EXAMINATION

5 BY EXAMINER CATANACH:

6 Q. Mr. Zinz, as I understand it the primary reason  
7 for moving the well south is to get further away from the  
8 fault? Is that one of the reasons?

9 A. The primary reason for moving the well to the  
10 south was to get on the upthrown side of the fault.

11 Q. Okay. Sorry, the primary reason for not going  
12 further south, at least as far as the Devonian is  
13 concerned, is what?

14 A. The Morrow, which is the primary objective.  
15 We're trying to stay as far away from that Government L  
16 well because of drainage.

17 That well -- both those wells right there will  
18 take out approximately -- These are cum maps. The  
19 Government L Number 2 has already made the 4.1; the  
20 Government L Number 1 should be about a 7-BCF well. So  
21 that's like 11 Bs out of that pod right there, so there's a  
22 danger of drainage up in Section 7, and we want to be as  
23 far away from those wells as we possibly can, and still be  
24 on the upthrown side of that fault?

25 Q. So that's what's driving the location, is

1 actually the Morrow --

2 A. Yes.

3 Q. -- perforations --

4 A. Yes.

5 Q. -- not anything to do with the Devonian?

6 A. Right.

7 Q. In fact, if you move further south, you'll lose  
8 some sand thickness in the D interval?

9 A. Yes, that's possible, the way I've got it  
10 contoured.

11 And we -- As a comparison, we can see that the  
12 Sims well down here -- You know, it had a little bit of  
13 porosity, but it's just not a good well. We'd much prefer  
14 to pick up the thick sands like these wells up in Section  
15 5.

16 Q. The well in Section 7, in the northeast quarter,  
17 what's the status of that well?

18 A. It's actually a plugged-out well. I apologize,  
19 my Geographics software system didn't make some of these  
20 wells plugged producers.

21 Q. Okay.

22 A. It should look like these symbols up to the north  
23 here in some of these wells.

24 Q. Okay. That was completed in the C interval?

25 A. Yes.

1 Q. And why was that uneconomic, or why was it not a  
2 prolific producer?

3 A. Why was it? It was -- It probably had a low  
4 permeability. We did not have any core data on it, but  
5 based on the resistivity logs it didn't look like it had  
6 very good perm.

7 And that's another risk as well. You could be in  
8 the channel and not have perm.

9 Q. That was just completed in the C interval, as far  
10 as you know?

11 A. Yes, it was, just the C. They did production-  
12 test the D sand, but it was wet.

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

14 MR. CARR: That concludes our presentation in  
15 this case.

16 EXAMINER CATANACH: Okay, there being nothing  
17 further in this case, Case 11,795 will be taken under  
18 advisement -- I'm sorry, we're going to continue this case.

19 MR. CARR: Yes, sir, we'll continue this for two  
20 weeks.

21 EXAMINER CATANACH: Okay, this case will be  
22 continued to June 26th.

23 (Thereupon, these proceedings were concluded at  
24 10:18 a.m.)

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 11795  
\* \* \* heard by me on June 12 1987

*David A. Catnach*, Examiner


## 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 16th, 1997.

  
\_\_\_\_\_  
STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998