

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 NEARBURG EXPLORATION )  
 COMPANY, L.L.C., FOR COMPULSORY POOLING )  
 AND AN UNORTHODOX GAS WELL LOCATION, )  
 LEA COUNTY, NEW MEXICO )

CASE NO. 11,747

ORIGINAL

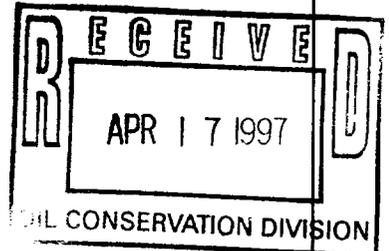
REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

March 20th, 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, March 20th, 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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Examiner Hearing  
CASE NO. 11,747

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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 10:02 a.m.:

3  
4           EXAMINER CATANACH: Okay, call the hearing back  
5 to order, and at this time we'll call Case 11,747.

6           MR. CARROLL: Application of Nearburg Exploration  
7 Company, L.L.C., for compulsory pooling and an unorthodox  
8 gas well location, Lea County, New Mexico.

9           EXAMINER CATANACH: Appearances in this case?

10          MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of  
11 the Santa Fe law firm of Kellahin and Kellahin, Santa Fe,  
12 New Mexico, appearing on behalf of Nearburg Exploration  
13 Company, L.L.C.

14           I have two witnesses to be sworn.

15          EXAMINER CATANACH: Any additional appearances?

16          MR. KELLAHIN: Mr. Examiner, the record should  
17 reflect an entry of appearance by James Bruce on behalf of  
18 New Tex -- it's spelled as two separate words -- New Tex  
19 Oil Company.

20           I'm aware of no other appearances.

21          EXAMINER CATANACH: Okay, will the witnesses  
22 please stand to be sworn?

23           (Thereupon, the witnesses were sworn.)

24          MR. KELLAHIN: Mr. Examiner, my first witness is  
25 a landman with Nearburg. His name is Duke Roush.

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DUKE ROUSH,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Roush, for the record, sir, would you please state your name and occupation?

A. Yes, my name is Duke Roush, R-o-u-s-h. I'm an independent land consultant doing work for Nearburg Exploration Company.

Q. On prior occasions, Mr. Roush, have you testified before the Division and qualified as an expert in matters of petroleum land management?

A. Yes, I have.

Q. Has it been your task on behalf of Nearburg to attempt to consolidate on a voluntary basis the various appropriate interest owners for participation in a well to be drilled in the west half of Section 14, which we've called the Aztec 14 Federal Com Number 1 well?

A. Yes.

Q. In addition, have you made a search for the offset operator in the east half of Section 14, to whom notice is entitled to be sent concerning the unorthodox gas well location?

A. Yes, I have.

1 MR. KELLAHIN: We tender Mr. Roush as an expert  
2 witness.

3 EXAMINER CATANACH: He is so qualified.

4 Q. (By Mr. Kellahin) Mr. Roush, let's orient the  
5 Examiner, if you will, by starting with Exhibit Number 1  
6 and have you identify and describe that display.

7 A. Exhibit Number 1 shows the --

8 (Off the record)

9 THE WITNESS: Exhibit Number 1 is a locator map  
10 showing the proration unit in yellow, the proposed  
11 location, which is 1980 from the north line, 2180 from the  
12 west line, and the acreage shaded in orange show the fee  
13 acreage that is being encroached upon by the well.

14 Q. (By Mr. Kellahin) The operator in the east half  
15 of Section 14 is whom?

16 A. New Tex.

17 Q. Have you been in contact with New Tex and as a  
18 result of those contacts obtained a written waiver as to  
19 the unorthodox well location?

20 A. Yes, I have.

21 Q. In the west half of the section, do you have a  
22 display that shows how that proposed spacing unit is  
23 subdivided?

24 A. Yes, I do. That would be Exhibit 2.

25 Q. Let's turn to Exhibit 2 and have you identify and

1 describe that display.

2 A. Exhibit 2 is a breakdown from the title that we  
3 had of this area, showing depth limitations and the various  
4 owners in each particular tract, the tracts being broken up  
5 into the northwest quarter, the north half of the southwest  
6 and the south half of the southwest.

7 Q. The percentages shown here are the percentages  
8 not proportionately reduced to the spacing unit, but the  
9 percentage as represented in each of the three tracts to be  
10 contained within the spacing unit?

11 A. That's correct.

12 Q. Let's turn to Exhibit Number 3 and see what  
13 happens to the percentages when they're proportionately  
14 reduced to the west-half spacing unit.

15 A. Exhibit 3 shows the same owners as outlined in  
16 Exhibit 2 that we've prorated them to the proration  
17 unit. As you can see, Nearburg has approximately 80.2135  
18 percent, Phillips Petroleum Company has 12.172 percent, New  
19 Tex Oil Company has 6.438 percent, and a gentleman by the  
20 name of Michael J. Patin has 1.176.

21 Q. The practice of Nearburg Exploration Company is  
22 to allow its operating company to be the operator under  
23 force pooling orders issued by the Division; is that not  
24 true?

25 A. That's correct.

1 Q. Is that your request in this case as well?

2 A. Yes, it is.

3 Q. The parties listed here, let's have a quick  
4 summary of the status as we have it this morning of your  
5 efforts to reach a voluntary agreement with Phillips, New  
6 Tex and Patin.

7 A. Mr. Patin has signed an AFE and JOA.

8 New Tex Oil Company has agreed to a farmout.  
9 We're in the process of finalizing that agreement as we  
10 speak. A formal final contract should go out early next  
11 week.

12 Phillips, we have actually gone to their offices,  
13 in addition to phone calls and notices, and shown them this  
14 prospect in detail, and we have yet to receive an election.

15 Q. At this point, then, you have all the necessary  
16 commitments in writing, properly executed from Mr. Patin to  
17 allow him to be dismissed from being subject to the pooling  
18 order?

19 A. That is correct.

20 Q. The other two entities, New Tex has not fully  
21 executed all the appropriate documents, and so it would be  
22 premature to release them from a pooling order when one is  
23 issued?

24 A. That's correct.

25 Q. And when all the paperwork is in place, if it's

1 appropriate, then, we will release them from the pooling  
2 order?

3 A. That's correct.

4 Q. Okay. Let's turn to the formal presentation of  
5 the proposal -- I'm sorry, I'm one exhibit ahead.

6 If you'll turn to Exhibit 4, let's talk about the  
7 waiver of the location. Identify and describe what we're  
8 seeing here.

9 A. This was a letter we sent February 27th to New  
10 Tex, which is the operator of the production in the east  
11 half, asking that they waive any objection to this  
12 unorthodox location. And as you can see, on 3-18, Hal  
13 Brunson, who is the president of New Tex, has executed this  
14 agreement.

15 Q. For the benefit of the Examiner, Nearburg has had  
16 difficulty with the unorthodox location insofar as  
17 satisfying the requirements of the Bureau of Land  
18 Management, and as a result you've had to move the location  
19 three times?

20 A. That's correct.

21 Q. The waiver represents the present requested  
22 location, and so this is the appropriate waiver as to the  
23 current location?

24 A. That is correct.

25 Q. All right. Let's start with the chronology of

1 formal proposals. If you'll start with Exhibit 5, identify  
2 and describe what Exhibit 5 is.

3 A. Exhibit 5 was our initial proposal to the  
4 partners. It was proposed at a location of 1650 north and  
5 1650 from the west line.

6 When we went out to stake the location, we had a  
7 conflict with an archaeology site. The BLM then requested  
8 that we move the location to 1980 from the north line, 1980  
9 from the west line.

10 On February 3rd, 1997, on Exhibit 6, we  
11 repropose the well, changing only the location on the AFE,  
12 and once again went out to stake it, and again ran into a  
13 conflict with an archaeology site.

14 The BLM then requested that we move the location  
15 to its present location, which is 1980 from the north, 2180  
16 from the west, and on February 7th, we repropose the well  
17 once again.

18 Q. In each instance, then, you have notified the  
19 parties to be pooled of the change of well location, and  
20 that's the only modification made when we look at Exhibits  
21 5, 6 and 7?

22 A. That's correct.

23 Q. Let's look at the AFE attached. The AFE that was  
24 submitted to the proposed working interest owners in the  
25 spacing unit was prepared by Nearburg Producing Company?

1           A.    Yes, sir.

2           Q.    In response to receiving the proposed estimate of  
3 well costs, have any of the parties involved objected to  
4 any of the well costs?

5           A.    No, sir.

6           Q.    To the best of your knowledge and information and  
7 belief, are these typical costs utilized by your company  
8 and others for drilling wells in this area to this depth?

9           A.    Yes, it is.

10          Q.    Do you have a recommendation to the Examiner as  
11 to overhead rates to be applied in the force pooling order,  
12 upon issuance of that order?

13          A.    Yes, I do.

14          Q.    Are the proposed operating charges on a monthly  
15 basis identical to the proposed operating charges on a  
16 monthly basis that you submitted to these interest owners  
17 in the form of a joint operating agreement?

18          A.    Yes, they are.

19          Q.    And what is your requested rate, sir?

20          A.    Drilling well rate would be \$6000 per month,  
21 producing well rates would be \$600 per month.

22          Q.    In response to the formal proposals, then, you  
23 have summarized for us the status of your efforts with Mr.  
24 Patin which have realized a written agreement, you've  
25 summarized the New Tex negotiations.

1           Do you have -- Let me turn your attention to  
2 Exhibit 8 and have you summarize the status of your  
3 negotiations with Phillips..

4           A.     Exhibit 8 is just a memo regarding the meeting we  
5 had with the Phillips personnel. It was held on March  
6 24th, I believe. I believe this memo was written the day  
7 after. We left them with copies of the cross-sections and  
8 the structure maps and three isopach maps which I think  
9 Jerry will go over here shortly.

10          Q.     To the best of your knowledge, then, you have  
11 provided Phillips with your geologic conclusions, opinions  
12 and exhibits and given them an opportunity to participate,  
13 to farm out or to otherwise voluntarily commit their  
14 interests to the spacing unit?

15          A.     Yes, we have.

16          Q.     To the best of your knowledge, have you exhausted  
17 all reasonable efforts to accomplish this on a voluntary  
18 basis?

19          A.     I believe we have, yes.

20          Q.     Is it now necessary, in order to go forward with  
21 the consolidation of this, to have the Phillips interests  
22 committed by result of a compulsory pooling order?

23          A.     Yes, it is.

24          Q.     Let me ask you now to turn to Exhibit 9 and  
25 identify and describe for us Exhibit 9.

1           A.    Exhibit 9 is the APD we filed with the feds,  
2 setting forth our well location, depths, et cetera.

3           Q.    And attached to that is a copy of the C-102 which  
4 shows the third revised location and the final proposed  
5 location?

6           A.    That's correct.

7           Q.    To the best of your knowledge, is this a location  
8 that now is subject to being approved by the Bureau of Land  
9 Management?

10          A.    Yes, it is. The location is actually the  
11 location requested by the BLM.

12          Q.    All right. And to the best of your knowledge,  
13 there is -- you believe that the BLM will approve the well  
14 at this location?

15          A.    Yes, I do.

16          Q.    So if the Division also approves the unorthodox  
17 location, to the best of your knowledge, we're not going to  
18 have to come back and ask them to change their decision?

19          A.    I hope not.

20                MR. KELLAHIN: Mr. Examiner, that concludes my  
21 examination of Mr. Roush.

22                We move the introduction of his Exhibits 1  
23 through 9.

24                EXAMINER CATANACH: Exhibits 1 through 9 will be  
25 admitted as evidence.

## EXAMINATION

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BY EXAMINER CATANACH:

Q. Mr. Roush, how do you know that they're going to approve that location?

A. Well, we don't have a guarantee that they will approve it, but this location is actually the location that they selected.

Q. Have you done an archaeological survey on this thing?

A. Yes.

Q. Okay. Is there other factors besides topographic factors that caused you to locate the well in this particular quarter section?

A. I don't believe so, no.

Q. There's no geologic factors involved?

A. I'll let Jerry address that, but I don't think that -- The geology was not as critical in this situation as it is in others.

Q. Okay. Do you think Phillips will join?

A. No.

Q. You initially proposed this back to them in January?

A. Yes, sir.

Q. Did you actually start talking to them at that time?

1           A.    Yes, our general practice is to send out the  
2 proposal, let them have about a week to ten days, and then  
3 follow up with phone calls.

4                    They called us shortly after the proposal. I  
5 spoke with Georgia Fenton. We had lunch with Georgia  
6 Fenton and we've shown this to Georgia Fenton, and so I  
7 think we've clearly exposed them as much as we could. In  
8 fact, we gave them the geology prior to the hearing and a  
9 formal presentation.

10           Q.    You met with this lady -- Do you remember the  
11 date? Was it back in January?

12           A.    In January there were primarily phone calls. We  
13 had lunch with them sometime in February, early February,  
14 and then we actually had a formal presentation, I think, on  
15 the 24th of February. And in that presentation they had a  
16 geologist present, and I didn't get her last name. I can't  
17 remember it now.

18           Q.    This is primarily a Morrow test; is that right?

19           A.    That's correct.

20           Q.    Do you know if New Tex -- Do they operate a  
21 Morrow well in the east half of this section?

22           A.    Is that a Morrow?

23                    MR. ELGER: Yes.

24                    THE WITNESS: I believe it is. It's in the Hat  
25 Mesa.

1 Q. (By Examiner Catanach) And as I understand it,  
2 is it Nearburg Producing Company that you wish named  
3 operator?

4 A. Yes, it is.

5 Q. Anybody express any concern on your overhead  
6 rates?

7 A. No.

8 Q. I'm sorry, I didn't catch the name of the -- The  
9 president of New Tex is who again?

10 A. His name is Hal Brunson. I think it's  
11 B-r-u-n-s-o-n.

12 EXAMINER CATANACH: Okay. I have nothing further  
13 of this witness. You may be excused.

14 MR. KELLAHIN: Mr. Examiner, my next witness is  
15 Jerry Elger.

16 JERRY B. ELGER,  
17 the witness herein, after having been first duly sworn upon  
18 his oath, was examined and testified as follows:

19 DIRECT EXAMINATION

20 BY MR. KELLAHIN:

21 Q. Mr. Elger, would you please state your name and  
22 occupation?

23 A. Jerry Elger, I'm a geologist for Nearburg  
24 Producing Company.

25 Q. And where do you reside, sir?

1           A.    In Midland, Texas.

2           Q.    On prior occasions, have you testified before the  
3 Division and qualified as an expert geologist?

4           A.    Yes, I have.

5           Q.    Is the work product that we're about to examine  
6 and the geologic conclusions yours?

7           A.    Yes, they are.

8           Q.    Let me direct your attention to Exhibit 10, and  
9 let's use this as a locator map for a minute. Mr. Roush  
10 testified that Nearburg had to move the location three  
11 times before we could find a surface use position in a  
12 spacing unit that was acceptable to the BLM. What was your  
13 first location?

14          A.    I believe it was 1650 from the north and west  
15 lines.

16          Q.    You were trying to drill a standard location in  
17 the spacing unit?

18          A.    That's correct.

19          Q.    Is the proposed unorthodox location that's  
20 currently requested still a suitable location for a well  
21 drilled to test for the deep gas?

22          A.    Yes, it is.

23          Q.    Let's talk about Exhibit Number 10, and describe  
24 for me if there is a structural component that's of  
25 importance to you in trying to locate the well in the

1 spacing unit at its best possible location.

2 A. This structure map is on the top of the lower  
3 Morrow, which is a marker I'll identify on Exhibit Number  
4 11 when we cover it. Basically what it shows is the  
5 anticline extending across into Section 11, and the  
6 proposed drill site in the unit spacing, which is the green  
7 box, basically at -- slightly low to the existing producing  
8 well in the east half of Section 14. Structure really is  
9 unimportant here.

10 Q. When we look at the offset well in the east half  
11 of 14 that's operated by New Tex, to the best of your  
12 knowledge, it's productive from what formations?

13 A. From the Morrow.

14 Q. Do you know what the Division utilizes as the  
15 pool name for the Morrow production in this area?

16 A. The field name?

17 Q. Yes, sir.

18 A. I believe it's the Hat Mesa.

19 Q. When we look at Exhibit Number 10, identify and  
20 describe for us the information shown on that display.

21 A. Well, in addition to the Morrow structure, this  
22 map also combines as a production map, and as the legend  
23 indicates, each Morrow production is indicated by the blue  
24 shading at each wellbore.

25 There are six producers in the vicinity of the

1 proposed location, all of which are either current of  
2 former Morrow producers. There has been no other  
3 production from the Pennsylvanian or Permian in this  
4 particular area to date.

5 The red numbers by each well indicate the  
6 cumulative production in BCF, and that is followed by the  
7 current daily rate based on the latest figures released by  
8 the OCD for each well as it produces from the Morrow.

9 Q. When you look at the 320 gas pools below the top  
10 of the Wolfcamp, which of the pools, in your opinion, gives  
11 you the greatest probability of being commercially  
12 productive in the spacing unit?

13 A. By far it's the Morrow.

14 Q. Is there still a risk associated with this Morrow  
15 location?

16 A. Yes, there is.

17 Q. Do you have a geologic opinion of a percentage of  
18 risk to be associated with the issuance of a compulsory  
19 pooling order?

20 A. Yes, I do.

21 Q. And what is that opinion?

22 A. That would be 200 percent.

23 Q. Let's look at Exhibit Number 11, which is your  
24 cross-section. On that display is a line of cross-section,  
25 and it's the same line of cross-section we're seeing on

1 Exhibit 10?

2 A. That's correct.

3 Q. Give us a second, let us unfold Exhibit 11, and  
4 then we can talk about it.

5 Let's start off and identify the color code so we  
6 understand what your color code is.

7 A. Well, in this particular area it's Nearburg's  
8 procedure to -- we have identified three separate packages  
9 of Morrow, and those are labeled on this cross-section.  
10 The top of the Morrow we call the Morrow "A", the top of  
11 the main Morrow clastics package we call the Morrow "B",  
12 and the top of the lower Morrow, which is at the base of  
13 that brown shale which is shaded on the two end wells, we  
14 call the top of the Morrow "C". That's the marker we've  
15 utilized in Exhibit Number 10 to construct the structure  
16 map.

17 The color coding is going to be referenced to  
18 three additional exhibits that we'll discuss in terms of  
19 the isopachs and production from two upper Morrow sands,  
20 one of which is shaded green and one of which is shaded  
21 pink, and then a main upper Morrow "B" package, which is  
22 the main package that's been shaded yellow on this display.

23 Q. We're going to see three isopachs, then?

24 A. That's correct.

25 Q. And there's going to be an "A", an upper "A", a

1 lower "A", and then --

2 A. -- upper "B".

3 Q. -- this upper "B".

4 The top and the bottom of each of these isopached  
5 intervals correspond to the color codes shown on the cross-  
6 section for those intervals?

7 A. That's correct.

8 Q. Let's look at the cross-section on the upper "A"  
9 sand, and show us your geologic conclusions about that  
10 opportunity.

11 A. Well, the upper "A" is producing from -- and this  
12 cross-section includes both a north offset and an east  
13 offset to the proposed drill site, and the wells were  
14 initially completed from perforations that are -- have been  
15 shaded red in the depth column on all three of these logs.

16 Q. Do you have any well control or well data to the  
17 west and south of your proposed location?

18 A. Not at this time, no, we do not.

19 Q. Would that constitute an element of the risk  
20 involved?

21 A. Yes, it would.

22 Q. When we look at the lower "A", show us what you  
23 see in the wells shown on the cross-section as that  
24 opportunity.

25 A. Well, the lower "A" is only present in the well

1 that is immediately to the east of the location. It's not  
2 present to the north, and it's not present in the Section  
3 13 well.

4 So these sands -- Our interpretation applies to  
5 these sands based on the geometry of their occurrence  
6 across this Hat Mesa structure, and there certainly is a  
7 degree of risk associated with the interpretation of where  
8 these sands project.

9 Q. The lower "A" sand is even riskier than the upper  
10 "A" in terms of being able to find located on a well log in  
11 the immediate area?

12 A. Yes.

13 Q. Let's talk about the upper "B" sand. What's the  
14 opportunity there?

15 A. The upper "B" sand is -- I would almost classify  
16 it as the primary target for this test. It's a series of  
17 sands; it consists of a series of packages of sands.

18 The well that's immediately to the west of our --  
19 east of our location, for example, subdivides into three  
20 separate sand packages.

21 The well to the north of us separates also into  
22 three, but only two of them have been perforated.

23 The well of the far east side of the cross-  
24 section at A' has a nice sand package developed, but when  
25 you look back at the -- refer back to the production

1 history of that well, that really has not been a very good  
2 well.

3 This will be -- the risk of this package will be  
4 exemplified by the well in the southwest quarter of Section  
5 12, which has, when we get to that isopach map, has a very  
6 thick sand package in the upper B, but yet was a very  
7 noneconomic well. In fact, it was virtually a dry hole.  
8 So there's not necessarily a relationship between sand  
9 thickness and productivity from this sand, so there again  
10 lies the risk.

11 Q. Give us a generalized description of the Morrow  
12 system that you're targeting here.

13 A. Well, the two upper Morrow sands, the green and  
14 pink units, our interpretation is that these represent some  
15 sort of channelized deposit; they occur in the wells to the  
16 north and project across this particular area.

17 The upper "B" sand packages, when we look at that  
18 isopach map, consists primarily of northeast-southwest  
19 oriented sands, which we are interpreting as being  
20 offshore-bar-type deposits.

21 Q. Let's turn to the isopachs. Give us a moment to  
22 fold up the cross-section, and then we'll turn to the next  
23 displays.

24 All right, if you'll turn to Exhibit 12, I've  
25 marked the upper A gross sand isopach as Exhibit 12. Let

1 me have you identify and describe that display.

2 A. Exhibit 12 is the isopach map, and it's a gross  
3 sand isopach map of this upper A green-shaded sand on the  
4 cross-section.

5 The blue shading by each of the three wells on  
6 this map indicates that those wells are perforated in this  
7 upper sand package. Information released by Phillips on a  
8 well in the north half of Section 11 indicates that there  
9 was a drill stem test run across one of these -- this  
10 particular sand, and the results of that test are posted on  
11 this isopach map.

12 The well immediately north of the proposed  
13 location, which is included on the cross-section, has 10  
14 feet of sand in this particular package. And the well to  
15 the immediate east of the proposed location, in the east  
16 half of 14, has about 13 feet of sand in this package.

17 We're projecting that at the proposed location we  
18 could encounter somewhere on the order of 10 feet of sand,  
19 probably looking somewhat like the Phillips well to the  
20 north.

21 The -- One of the problems, you have a little bit  
22 of a problem in determining which of these sands, either  
23 the green, pink or yellow -- What the reserves are from  
24 each one of these packages is very difficult to ascertain,  
25 the fact that it was a common practice to perforate all of

1 these sands simultaneously and produce them all together as  
2 one unit. So you can't necessarily break out how much  
3 reserves comes from this sand or how much from the other  
4 sand.

5 We can only work across other areas of the Hat  
6 Mesa structure and make judgments of wells that are  
7 producing only from individual packages.

8 Q. Let's look at Exhibit 13 and have you identify  
9 and describe that display.

10 A. Exhibit 13 is an isopach of the lower "A" pink  
11 sand. And again, just like the upper "A" sand, it appears  
12 to be a channelized deposit with a north-south orientation  
13 across this prospect area. And again the wells in blue are  
14 wells that have perforated this particular sand package.

15 The well in -- As I previously mentioned, the  
16 well to the immediate north of the proposed drill site in  
17 the south half of 11, this sand is absent, and it's also  
18 absent in the north half of 13 and in the west half of  
19 Section 12.

20 So this is a more speculative sand, whether it  
21 will encounter either a small portion or remnant or none at  
22 all of this particular sand. The way I have it -- The map  
23 interpreted, we could encounter somewhere between 10 and 15  
24 feet, but again, that's speculative.

25 Q. All right. And the final map is Exhibit 14 of

1 the upper "B" gross sand. Let's have you identify and  
2 describe that display.

3 A. Exhibit 14 is the sand that again is the  
4 consolidation of this package of upper "B" sands, and I've  
5 isopached those in a gross isopach.

6 Again, you see a sand thick consistent with what  
7 we feel is a marine bar, with an orientation northeast-  
8 southwest. The thickest well that encountered this  
9 particular package is the well, again, in the southwest  
10 quarter of Section 12, which was a very poor performing  
11 well.

12 The two red numbers you see by that well, the 16  
13 and 74, indicates the total net sand over the total gross  
14 sand, and I believe I used an 8-percent porosity cutoff to  
15 give net values to each one of these wells in this  
16 particular sand.

17 So you can see that sand is fairly thick, but it  
18 only has basically 16 feet of net pay, whereas the well to  
19 the north of us in section 34 has 34 feet of pay, and the  
20 well to the east of us in 14 has 32 feet of pay.

21 The risk of this sand is that there's not a lot  
22 of consistency with net feet of pay versus productivity,  
23 and that's borne out by the well in the north half of  
24 Section 13. It had what the log shows to be 40 feet of  
25 pay, but yet was a poor performer.

1 Q. And in all three maps we have an absence of well  
2 control to the west and to the south?

3 A. That's correct.

4 Q. And when you package all three together, then it  
5 appears that you need to be in the northern portion of the  
6 spacing unit, and to hit all three at a better target you  
7 need to be in the eastern portion of the northern half?

8 A. That's correct.

9 Q. Is the proposed unorthodox location a  
10 geologically acceptable location in view of the surface  
11 limitations involved?

12 A. Yes, it is.

13 Q. Do you recommend approval of the well at this  
14 location?

15 A. Yes, I do.

16 MR. KELLAHIN: That concludes my examination of  
17 Mr. Elger. We move the introduction of his Exhibits 10  
18 through 14.

19 EXAMINER CATANACH: Exhibits 10 through 14 will  
20 be admitted as evidence.

21 EXAMINATION

22 BY EXAMINER CATANACH:

23 Q. Mr. Elger, you don't have a lot of well control  
24 to the south and to the west of that location; is that  
25 correct?

1           A.    Yes.  I believe the closest control point is down  
2           in Section 22, and that's a well that was very recently  
3           drilled by Penwell, and I don't believe there's any data  
4           released yet on that well.

5           Q.    Does the well control that you presently have  
6           indicate that that -- the upper "B" sand should be oriented  
7           in that direction?

8           A.    Towards Section 22?

9           Q.    Well, from the southwest to the northeast?

10          A.    Yes, uh-huh, that's correct.

11          Q.    The main risk in not drilling in the south half  
12          of this half section is the -- is it your opinion the main  
13          risk is that it's not hitting the upper "B" in the thick  
14          portion?

15          A.    That's correct.

16          Q.    I guess there's also some risk involved in not  
17          encountering the upper "A"?

18          A.    That's correct, plus there's a risk -- You know,  
19          none of these wells to date have produced any water.  
20          However, if you go back to Exhibit 10, the structure map,  
21          you would be continuing to move into a downdip position in  
22          the southwest quarter versus the northwest.

23          Q.    Do you have any wells that are producing from  
24          about that same structural position, above that?

25          A.    Right now, all the wells on this map are above

1 this.

2 I don't recall whether some of the wells just  
3 immediately off to the northeast of this map have  
4 encountered the sands this low. There may be one in  
5 Section 7 of the adjacent township and range.

6 Q. How confident are you in your interpretation, as  
7 far as it goes, into the south half of this half section?

8 A. Well, you're obviously moving more -- I'm less  
9 confident than I am of the northwest quarter, simply from  
10 the fact that you're moving away from your well control  
11 point with your values in that well in the south half of  
12 Section 11.

13 Q. You've strictly used well control in your  
14 interpretation?

15 A. Yes.

16 EXAMINER CATANACH: Okay. I have nothing  
17 further. The witness may be excused.

18 MR. KELLAHIN: That concludes our presentation in  
19 this case, Mr. Examiner.

20 EXAMINER CATANACH: Okay, there being nothing  
21 further in this case, Case 11,747 will be taken under  
22 advisement.

23 (Thereupon, these proceedings were concluded at  
24 10:40 a.m.)

25

\* \* \*

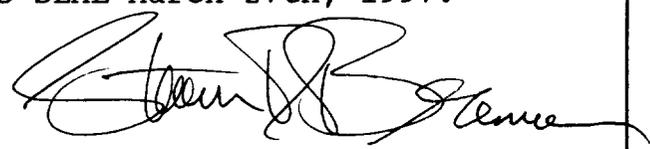
CERTIFICATE OF REPORTER

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 27th, 1997.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner's hearing of Case No. 1777, heard by me on March 1997.  
David R. [Signature], Examiner  
Oil Conservation Division