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,
EDDY COUNTY, NEW MEXICO

CASE NO. 11,679

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REPORTER'S TRANSCRIPT OF PROCEEDINGS EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

December 19th, 1996 Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, December 19th, 1996, 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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APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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By: W. THOMAS KELLAHIN

* * *

1	WHEREUPON, the following proceedings were had at
2	1:20 p.m.:
3	EXAMINER CATANACH: At this time we'll call the
4	hearing back to order and call Case 11,679.
5	MR. CARROLL: Application of Nearburg Exploration
6	Company, L.L.C., for compulsory pooling, Eddy County, New
7	Mexico.
8	EXAMINER CATANACH: Are there appearances in this
9	case?
10	MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
11	the Santa Fe law firm of Kellahin and Kellahin, appearing
12	on behalf of the Applicant, and I have two witnesses to be
13	sworn.
14	EXAMINER CATANACH: Are there additional
15	appearances?
16	Will the two witnesses please stand to be sworn
17	in?
18	(Thereupon, the witnesses were sworn.)
19	DUKE W. ROUSH,
20	the witness herein, after having been first duly sworn upon
21	his oath, was examined and testified as follows:
22	DIRECT EXAMINATION
23	BY MR. KELLAHIN:
24	Q. Would you please state your name and occupation?
25	A. Yes, my name is Duke Roush, R-o-u-s-h. I'm an

independent land consultant on contract with Nearburg Exploration Company.

- Q. Mr. Roush, on prior occasions have you qualified before the Division as an expert in petroleum land management issues?
 - A. Yes, I have.

- Q. And as a consultant for Nearburg, have you made yourself knowledgeable about the ownership with regards to the proposed spacing unit, and based upon that knowledge, have you attempted to consolidate on a voluntary basis the various working interest owners in order to form a spacing unit and commit all the working interest owners to the drilling of the well?
 - A. Yes, I have.
- MR. KELLAHIN: We tender Mr. Roush as an expert petroleum landman.

EXAMINER CATANACH: He is so qualified.

- Q. (By Mr. Kellahin) Mr. Roush let's first turn to Exhibit Number 1 and have you identify the plat for us and help us understand the location of the spacing unit.
- A. Exhibit Number 1 is a locator map. It shows our proposed proration unit, being the west half of Section 3, located in Township 18 South, Range 28 East, Eddy County, New Mexico. This is approximately 12 miles southeast of Lakewood, New Mexico.

- Q. What is Nearburg proposing to do?
- A. We're proposing to drill a 10,900-foot Morrow test.
- Q. Let's turn to Exhibit Number 2 and have you identify and describe that display.
- A. Exhibit Number 2 Is a breakdown of the individual ownership by tract, showing the location of the well, which is 1650 from the north, 1650 from the west.
- Q. When we look at the tract divisions within the 320 gas spacing unit, are there interest owners in Tracts 2 and Tract 3 that you have not yet had committed to the project?
 - A. That is correct.
- Q. So there is currently a need, despite your efforts, to have certain of these parties and companies subject to a pooling order for 320 gas spacing?
- A. Yes.

- Q. And in the event that the well is successful for shallow gas spacing on 160 acres, there would still be certain of these parties that are not yet committed to that spacing unit?
- A. That is correct. We've had two individual parties we've been unable to locate.
- Q. And then finally, if the well is dedicated to a 40-acre spacing unit, there will still be parties for which

you need a force-pooling order?

- A. That is correct.
- Q. Let's use this exhibit for a moment and have you identify for us those parties that you have, despite your efforts, not been able to locate at all.
- A. Yes, there's two individuals. Their names are Cynthia Morton Norgaard and Sally Morton. We attempted through a Mr. Randolph Richardson to run these individuals down. He wrote a letter to a Mr. Randy Watts, who is the consultant we were using at the time, and he basically said in his letter of April 29, 1996, that, Frankly I believe that Debbie, Sally and Cindy are not wanting to be found.

We have still to this date not been able to locate them. We have written letters to the other heirs of Louetta Rowley, who these interests stem from, asking that they attempt to help us locate these various individuals. We went a step further and through a computer program took their last known address, plugged it into a program that pulls up the names and known numbers of the individuals within those cities, and we are still unable to locate them.

- Q. Apart from those two individuals, at this point do you have final signed agreements with any of the other interest owners in the spacing unit?
 - A. Yes, we have a final signed JOA and AFE with

Louis Dreyfus.

- Q. All right. So they can be deleted from --
- A. That's correct.
 - Q. -- the pooling order?
 - A. Vernon Eggleston and Cheryl Eggleston Austin have all executed the JOA.
- Q. All right. And although you're working with Yates, ARCO and Marathon, you have not yet reached the point where those companies have signed final agreements?
- A. No, they have not signed final agreements, but we have had negotiations.
 - Q. Okay, let's turn to Exhibit 3 --
- 13 A. Okay.
 - Q. -- and look at the summary of the interest owners and their percentage interests under the assumption that this is dedicated to a 320-acre spacing unit. Is this how you make the calculation in the results?
 - A. That is correct.
 - Q. All right. Let's turn now to the package of documents that supports your efforts to form a voluntary agreement among the interest owners, and you made reference to Mr. Richardson's efforts on your behalf. We're looking at what is marked as Nearburg Exhibit 4, and this is one of the communications Mr. Richardson has had, and he's indicating his efforts to find individuals that had an

interest?

- A. That is correct.
- Q. All right. Without going through the documents or the information shown in Exhibit 4, summarize for us -- Other than Cynthia Norgaard and Sally Morton, you have made contact with all the other interest owners?
 - A. That is correct.
- Q. Now, some of these parties appear to be related to Sally Morton and Cynthia Morton Norgaard; is that true?
 - A. That is true.
- Q. And either you or Mr. Richardson have contacted those family members, and those family members refuse to either divulge the location of Sally Morton or Cynthia Norgaard or pretend not to know or, in fact, do not know?
 - A. That's correct.
- Q. All right. Let's turn -- All these are stapled together, Mr. Roush, but if you'll turn to Exhibit 5 which is the fourth sheet down in the stapled exhibit, identify and describe what we're seeing here.
 - A. Exhibit 5?
 - Q. Yes, sir, it's a letter dated June 7th.
- A. That is our letter proposing the well. We sent this to the working interest owners, sending them an AFE setting forth the estimated costs and expenses expected in drilling and completing this well, along with a proposed

10 JOA to govern the drilling of the well. 1 And how did you communicate this to these working 2 0. interest owners? 3 By certified letter, certified mail. 4 Α. Okay. Page 2 indicates some notations on that 5 Q. page that confirms that you could not find Ms. Norgaard or 6 7 Sally Morton? Α. That is correct. 8 But the others you did make contact to about this 9 Q. specific proposal? 10 That's correct, and received a return, evidenced 11 on the certified mail that they had, in fact, received the 12 documents. 13 Have you received any objection or complaints 0. 14 with regards to the proposed AFE? 15 No, sir, we have not. 16 Α. And this AFE was prepared by one of your 17 0. engineering experts that does this on a regular course of 18 doing business for Nearburg? 19 That is correct. 20 A. And have you identified wells in this area which 21 Q. are similar in fashion for which the Division has already 22

Q. Do you have a recommendation to the Examiner for

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accepted overhead rates?

Yes, we have.

A.

overhead rates to be applied in this pooling case? 1 Yes, and that would be \$6000 for a drilling well 2 A. rate and \$600 for a producing well rate. 3 And how do those rates compare to the Ernst and 4 Young tabulation of overhead rates? 5 I believe Ernst and Young are a little above 6 Α. 7 \$5800 and \$580. Do you have examples of where the Division has 8 approved recently, for wells of this type in this area, the 9 overhead rates that you're requesting? 10 Yes, they have, by Order Number R-10,626, which 11 Α. was a compulsory pooling of the north half of Section 4, 12 which is a spacing unit to the west, that was ordered that 13 the overhead rate be \$6000 and \$600. 14 In addition, how has the Commission addressed and 15 resolved the risk factor penalty for wells of this type in 16 17 this area when they have issued pooling orders? In the same order it was 200 percent. 18 A. 19 Q. If you'll turn beyond the AFE and beyond the 20 copies of the return receipt cards, you'll finally turn to Exhibit Number 6, which is the letter of June 18th. 21 Α. That's correct. 22 Would you identify and describe for us what is 23 0. the purpose of this letter? 24 It was a clarification as to the parties that had 25 Α.

an ownership in the proration unit, and we sent out a revised Exhibit A to reflect the change in ownership.

- Q. Okay. Then if you'll turn two more pages, then you'll see a series of letters that are all addressed to different individuals. The content is identical, and they're Exhibits 7 through 10. What is occurring here?
- A. Again, this was the heirs of Louetta Rowley, and we were attempting to try and get them to give us a response and at the same time hopefully give us some help in trying to locate the heirs we were unable to locate.
- Q. At this point, Mr. Roush, have you formed an opinion as to whether or not you have exhausted all goodfaith effort to obtain a voluntary agreement with the various interest owners involved?
 - A. Yes, I have.

- Q. And what is that opinion?
- A. That we have done the best that we can and that we'll be unable to locate these two individuals, we definitely need to force-pool those, and we will continue to work with the balance of the parties to get a voluntary agreement with the individual parties.
- Q. In the absence of getting those final agreements on a voluntary basis, though, you do need the ability to drill this well and will therefore require a force-pooling order?

That is correct. A. 1 MR. KELLAHIN: Mr. Examiner, that concludes my 2 examination of Mr. Roush. 3 We move the introduction of his Exhibits 1 4 5 through 10. 6 EXAMINER CATANACH: Exhibits 1 through 10 will be admitted as evidence. 7 **EXAMINATION** 8 BY EXAMINER CATANACH: 9 Mr. Roush, the -- on your Exhibit Number -- well, 10 Q. the one that shows the interest ownership --11 Yes, sir. 12 A. -- that is for the 320-acre proration unit? 13 Q. That's correct. 14 Α. Does that change with reference to a 160 and a 15 Q. 40? 16 Yes, it will. That's the reason for the 17 Α. 18 additional -- Exhibit 2, to show the difference in tracts. 19 For a 40 it will, in fact, remain the same -- And actually I recant that. For a 40 it will be that -- as listed in 20 21 Tract 2, as will be a 160. So you will see that the interests vary a little bit. Atlantic, Yates and Marathon 22 23 would fall out of the well at that point in time. Okay. And at this point in time, you have an 24

agreement with what parties?

Louis Dreyfus has executed full agreement. 1 Α. Eggleston, Vernon Eggleston, and Cheryl Eggleston Austin. 2 Okay, and that's it? 3 Q. That's it. 4 A. Okay. You were able to locate the Debbie Morton 5 Q. 6 Thompson? 7 Α. Yes, we were. Okay. And how about the Murchison interest? 8 Does that still -- Are you still negotiating with them? 9 We're still negotiating with them. I spoke with Α. 10 Mike Daugherty today, and he has hopes of having that 11 executed in the next couple of days. 12 So do you anticipate Marathon, ARCO and Yates to 13 Q. eventually sign up? 14 One of the difficult problems we're 15 Yes, I do. having at this time of year is personnel out of the office, 16 people that need to approve things, people that need to 17 execute things. 18 19 We received a counteroffer from Yates, which I received today, I have not seen, so I'm not sure what that 20 is, but they have sent us a revised JOA for our review. 21 The Hickson interest, you're still talking 22 Q. to her? 23 24 A. Yes, and I believe that that will be sent in. Has that well already been staked? Do you know? 25 Q.

1 A. I believe it has. 2 Q. Okay. You've already gotten clearance? I believe we have. 3 A. EXAMINER CATANACH: I have nothing further. 4 MR. KELLAHIN: Mr. Examiner, Exhibit 11 is my 5 certificate of compliance with the notice requirements, to 6 7 which we've attached the copy of the notice letter, which included the Application itself. And then there are copies 8 of all the return receipt cards that we received back from 9 that mailing. 10 My next witness is Mr. Jerry Elger. 11 JERRY B. ELGER, 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. KELLAHIN: 16 For the record, sir, would you please state your 17 Q. name and occupation? 18 My name is Jerry Elger, and I'm a petroleum 19 20 geologist. On prior occasions, have you testified before the 21 Q. Division and had your qualifications as a geologist 22 23 accepted and made a matter of record? A. Yes. 24 Pursuant to your employment, have you made a 25 Q.

geologic investigation of this particular area with regards
to the drilling of this well?
 A. Yes, I have.

MR. KELLAHIN: We tender Mr. Elger as an expert petroleum geologist.

EXAMINER CATANACH: He is so qualified.

- Q. (By Mr. Kellahin) Let me have you turn your attention to the first of your displays. It's marked Exhibit Number 12. Would you identify and describe that for us?
- A. Exhibit Number 12 is a -- simply a production map around the spacing unit for this hearing. And it shows, as the legend indicates, the name of the -- it's color-coded for the formation, producing formation. It shows the field name, it shows the cumulative gas production, it shows the cumulative oil production, and it shows the daily rate as of April of 1996.
- Q. The color code at the bottom of the legend indicates the type of well that's productive within the area described on the map?
- A. That's correct, and the yellow, which is the majority of wells in this area, are Morrow producers.
- Q. Let's set that aside as a reference map for a moment and have you turn your attention to Exhibit Number
- 25 | 13. What are you describing here, Mr. Elger?

A. Exhibit 13 is an isopach. It's a gross isopach, and it also has net shaded green areas where well control has indicated that the Morrow formation is porous in nature. That's borne out by the production history of those particular wells.

- Q. Let's start with a general explanation of your geologic concept here. Let's start with the northern portion of the display where you have labeled this channel a distributary channel and have you describe the channel system as we move down into these three areas that you've described as areas of clean porous sand.
- A. The interpretation of the lower Morrow "C" zone, which this is an isopach of in this particular area, is that there's a distributary channel system, which is feeding a delta mouth bar complex, which is where the majority of the gas production in this particular area for the Morrow occurs.

You'll see a small lobe centered, concentrated in Section 29 of 17 South, 28 East, with a well shaded blue in there. By the legend, wells that have a blue shading are producing from this particular sand.

That well has been offset numerous times, as you can see. It's the only well that's shaded blue. It's the only well that's been productive from this particular sand. That well has cum'd in excess of 34 BCF and 300,000 barrels

of condensate.

Wells to the northeast of our proposed prospect area, you'll see a number of -- Actually, there's five wells that are shaded blue, which are also producing from this particular sand event, the lower "C".

And you'll see that there's -- I've transposed the cumulative production from the Exhibit Number 12 onto this isopach map, and you can see that there's also some tremendous cumulatives in that particular bar complex. Two wells in Section 25: one has cum'd 12 BCF, 80,000 barrels of condensate; one has cum'd 15.2 BCF and 181,000 barrels of condensate.

So this is a very prolific reservoir, and this is the target -- this is the horizon that we're targeting in this particular exploratory test.

- Q. When you look at your proposed location in 3 and compare it to the highly productive wells in Section 25, there is not yet geologic data to show that a well at your location is actually going to be connected with that same reservoir?
 - A. That's correct.
 - Q. Describe for us, then, the risk.
- A. Well, the risk, again, if I go back to Section

 29, we see that there's a very prolific well in Section 29.

 It's been offset more than a half a dozen times,

unsuccessfully. So that particular bar is relatively small, even though it has -- must have tremendous porosity to contain that significant of reserves.

The well -- The bar that's interpreted in Section 25, in the north half of Section 36 and the northeast quarter of Section 35, is by comparison a larger bar. We're not even sure that a bar exists across the proposed location. We've interpreted that one exists.

And even if one does exist, of course, there's no way to tell what size it would be, whether it would be more like the -- in areal extent for the bar up in Section 29 or the one off to the northeast.

- Q. Have you been able to form an opinion as a geologist as to a recommendation for a percentage risk factor penalty to apply in this case?
 - A. Yes.

- Q. And what is that opinion?
- A. The same as Mr. Roush testified to in the previous hearings out here, 200 percent.
 - Q. Let's take a moment and look at the crosssection, which is Exhibit 14. You have the line of crosssection shown on Exhibit 13, and you've also duplicated it as an index portion on the bottom of Exhibit 14.

Without spending a lot of time on it, give us the general summary of what you're interpreting here.

A. Again, this is a stratigraphic cross-section.

It's hung on the top of the lower Morrow, which we -- by nomenclature, we call the top of the "C" zone.

The sand, the thick sand, is readily apparent on the three wells on the right side of the cross-section.

Their sand exceeds 100 feet thick in one of the wells, uninterrupted. It's very -- nice-looking sand. That's the 15.2-BCF well. It's a very attractive target.

Simply -- The cross-section simply shows that stratigraphically, the sand that's developed in these wells off to the northeast of our prospect area is the same sand that's producing on the bar over in Section 29, with the large well, the 34-BCF well, being the well on the far left side of this cross-section.

That well continues to perform, I believe, at 1.5 million cubic feet per day, so I'm not real sure what the ultimate cum of that well is going to be, but it definitely is an attractive target.

- Q. You have between the attractive areas in Section 25 and your location in 3, we have the well in 35, shown in the cross-section, and while it has cum'd 2.5 BCF it is not nearly as prolific as the wells in Section 25, obviously?
 - A. That's correct.
- Q. Are there any other targets for a well at this location that are more optimistic than this one?

1	A. No.
2	Q. Is this your best chance?
3	A. This is the best This is the main reason we're
4	drilling this test.
5	Q. Okay. So if you have secondary objectives in the
6	wellbore, they truly are more speculative than this one?
7	A. That's correct.
8	MR. KELLAHIN: Okay. That concludes my
9	examination of Mr. Elger, Mr. Examiner.
10	We move the introduction of his Exhibits 12, 13
11	and 14.
12	EXAMINER CATANACH: Exhibits 12, 13 and 14 will
13	be admitted as evidence.
14	EXAMINATION
14 15	EXAMINATION BY EXAMINER CATANACH:
15	BY EXAMINER CATANACH:
15 16	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to
15 16 17	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to construct this isopach map?
15 16 17 18	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to construct this isopach map? A. That's correct.
15 16 17 18	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to construct this isopach map? A. That's correct. Q. What leads you to believe that there may be a
15 16 17 18 19	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to construct this isopach map? A. That's correct. Q. What leads you to believe that there may be a sand buildup in Section 3?
115 116 117 118 119 220	BY EXAMINER CATANACH: Q. Mr. Elger, you just used well control to construct this isopach map? A. That's correct. Q. What leads you to believe that there may be a sand buildup in Section 3? A. There is a well in the east half of Section 3, in

delta sides of these particular delta bar complexes.

A prime instance of that is a well in the north half of Section 2 which has 35 feet of sand, which was also unproductive, even though it had that much sand in it, and it was drilled as a south offset to the well that's the fourth from the right on the cross-section, the ARCO "BX" State Number 1, which made 2.5 BCF from the sand.

So we think that the well in Section 3 is in a position off the front of the delta mouth bar complex, and by moving a little more towards the source, we'll encounter a better quality reservoir.

There are quite a number of wells out here, as you can tell, that indicate where the sand is not present, and those help, as much as the wells that have penetrated the sand.

- Q. Are all of those wells nonproductive, basically?
- A. Well, again, I would defer to Exhibit 12, the production map, and you can see if there are wells that are not shaded blue on Exhibit 13, but they are producing from the Morrow, as indicated by the production map, then they are from some other unit developed within the Morrow, probably within the middle Morrow.

EXAMINER CATANACH: I have nothing further, Mr. Kellahin.

The witness may be excused.

Do you have anything else in this case?

MR. KELLAHIN: No, sir. EXAMINER CATANACH: There being nothing further in this case, Case 11,679 will be taken under advisement. (Thereupon, these proceedings were concluded at 1:48 p.m.)

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 December 27th, 1996.

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 hearing of Case No.//679

heard by me on Lecenta 19

, Examinar

Oil Conservation Division