### STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

DEPARTMENT
FEB 6 1997
Oil CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11,684

APPLICATION OF NEARBURG EXPLORATION
COMPANY, L.L.C., FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO

**ORIGINAL** 

# REPORTER'S TRANSCRIPT OF PROCEEDINGS

### EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 23rd, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, January 23rd, 1997, at the
New Mexico Energy, Minerals and Natural Resources
Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7
for the State of New Mexico.

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# I N D E X

January 23rd, 1997 Examiner Hearing CASE NO. 11,684

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APPLICANT'S WITNESSES:	
<u>DUKE ROUSH</u> (Landman)	
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JERRY B. ELGER (Geologist)	
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# EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1 Exhibit 2	5 6	11 11
Exhibit 3	8	11
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\* \* \*

### APPEARANCES

## FOR THE DIVISION:

RAND L. CARROLL
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## FOR THE APPLICANT:

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P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

### FOR MEWBOURNE OIL COMPANY:

HINKLE, COX, EATON, COFFIELD & HENSLEY 218 Montezuma P.O. Box 2068 Santa Fe, New Mexico 87504-2068 By: JAMES G. BRUCE

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               WHEREUPON, the following proceedings were had at
 2
     10:40 a.m.:
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               EXAMINER CATANACH: At this time we'll call Case
     11,684.
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               MR. CARROLL: Application of Nearburg Exploration
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     Company, L.L.C., for compulsory pooling, Eddy County, New
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11
     Mexico.
               EXAMINER CATANACH: Are there appearances in this
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13
     case?
               MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
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     the Santa Fe law firm of Kellahin and Kellahin, appearing
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     on behalf of the Applicant.
               I have two witnesses to be sworn.
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18
               EXAMINER CATANACH: Additional appearances?
               MR. BRUCE: Mr. Examiner, Jim Bruce from the
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     Hinkle law firm in Santa Fe, representing Mewbourne Oil
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     Company.
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22
               I do not have any witnesses.
               EXAMINER CATANACH: Additional appearances?
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               Will the witnesses please stand and be sworn in?
24
               (Thereupon, the witnesses were sworn.)
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5 DUKE ROUSH, 1 the witness herein, after having been first duly sworn upon 2 his oath, was examined and testified as follows: 3 DIRECT EXAMINATION 4 BY MR. KELLAHIN: 5 Mr. Roush, for the record, sir, would you please 6 Q. state your name and occupation? 7 Yes, my name is Duke Roush. I'm an independent 8 land consultant, representing Nearburg Exploration Company, 9 L.L.C. 10 On prior occasions have you testified before the 11 Division, Mr. Roush, and had your qualifications as an 12 expert in petroleum land matters accepted and made a matter 13 of record? 14 15 Yes, I have. Α. Are you involved on behalf of Nearburg concerning 16 the subject application and the proposal to consolidate the 17 interest owners for the drilling of the subject well? 18 19 Α. Yes, I am. MR. KELLAHIN: We tender Mr. Roush as an expert 20 21 witness. EXAMINER CATANACH: He is so qualified. 22 (By Mr. Kellahin) Let's turn to Exhibit 1 and 23

This tract is located in Section 4, Township 18

help orient the Examiner as to where this tract is located.

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Α.

South, Range 28 East, in Eddy County, New Mexico. It's approximately 14 miles southeast of the city of Artesia.

This plat shows the proposed east-half proration unit and the location, which is 1650 feet from the north line, 660 feet from the east line.

- Q. Let's turn to Exhibit 2 and look at how the proposed spacing unit is divided into various tracts.
- A. Yes, we've broken the entire east half by tracts and put the individual working interest owners, along with their percentages, by tract. And at the bottom of the page we have consolidated this into a 320-acre working interest unit, and that is their pro rata share of the working interest.
- Q. When we look at the northeast of the southeast, the tract that says Arco and Amoco --
  - A. Yes, sir.

- Q. -- do you have that interest divided 50-50?
- 18 A. That is correct.
  - Q. Prior to that division, who was the interest owner that had control of the right to produce that 40-acre tract?
    - A. That was Exxon.
  - Q. After you sent notification to Exxon, were you advised that Exxon had transferred its interest in that tract to others?

- A. Yes, we received a letter returning the AFE and JOA that we had sent them, stating that they had given a term assignment to Arco.
- Q. So that term assignment provided a split in ownership where Arco would have 50 percent?
- A. At the time it just said Arco. Subsequently we have found out that Arco has, in fact, assigned a half interest of that to Amoco.
- Q. Okay. In terms of providing an opportunity to Amoco to participate in the spacing units, have you been in contact with them concerning this proposal?
  - A. Yes, by phone.

- Q. Okay, and what is your understanding of their position with regards to this case?
- A. We did not notice Amoco when we sent out our original certified letters. I spoke with them on the phone as late as yesterday, explained to them that we were having a hearing.

And Arco and Amoco have, in this area -- It's a private arrangement, and I have obviously not seen any agreement, but they have formed some form of AMI in the area. And normally Amoco does not assign an interest of title until such time as a well has been drilled, but in this instance they did, in fact, assign Amoco an interest in it, so we immediately contacted them.

They are aware of the hearing and had no problem and did not send anyone up to contest.

MR. KELLAHIN: Mr. Examiner, because we have not resolved the issue of notice to Amoco, at the conclusion of the hearing I'm going to ask you to continue this for two weeks. Let me contact Amoco and see if we can obtain a written waiver concerning the notice. And if not, then I'll advise you of what the position is.

So that is an element that's unresolved today concerning Amoco.

- Q. (By Mr. Kellahin) As to the other interest owners --
  - A. Yes, we --

- Q. -- have you been in contact with all of them?
- A. Yes, we have. OXY has elected to participate.

Mewbourne has not made an election. We've had numerous phone calls with them. Unfortunately, their tract is very badly burdened, to the point of 62.5 percent for a net revenue.

Marathon has indicated they will probably participate but could not have an answer at this time.

Q. Let's turn to Exhibit 3, Mr. Roush, and look at the proposal concerning this well. When did you first send to the interest owners, with the exception of Amoco, the proposed letter, including an AFE, for the well at this

location?

- A. We sent these letters out certified November 21st, 1996, and have received the return receipt of the certified mail from all parties, with the exception of Amoco.
- Q. Each of the attachments in Exhibit 3, then, represents the letter to these various interest owners that would participate in the well?
  - A. That is correct.
- Q. And those parties were provided a copy of the AFE that's attached to the very end of the exhibit?
  - A. That's correct.
- Q. There are some of these interest owners that may yet still participate, but at this point there's at least one, as I understand, that you're unable to reach an agreement with and will have to have a compulsory pooling order for?
  - A. That is correct.
- Q. And that's the Mewbourne interest, and it's because it has such a small net revenue interest, you and Mewbourne are unable to arrange an agreement by which they can participate on a voluntary basis?
  - A. That's correct.
- Q. Do you have a recommendation to the Examiner for an overhead rate to apply during drilling and for producing

of the well if it's successful?

- A. Yes, that would be \$6000 and \$600.
- Q. What's your basis for that recommendation, Mr. 4 Roush?
  - A. That is consistent with some recent orders in the area, Order Number 10,728, which was a previous order for the north half of this section, which was never taken action on, and R-10,626, which was a recent Arco pooling whereby they had \$6000 and \$600.
  - Q. I think you have the numbers reversed. The 10,626 is the Nearburg/Mewbourne order --
    - A. Okay.
    - Q. -- and the other one is the Arco order.
  - A. Okay, I apologize.

MR. KELLAHIN: Mr. Examiner, the Case -- Order R-10,626 is a prior pooling order. It involved competing pooling applications by Mewbourne and Nearburg for a well in the northeast quarter of the section. However, that was for the orientation of the spacing unit, so it was north half.

This well has been reproposed, because the first one was never drilled. The force-pooling order was entered, the parties resolved their difference by an exchange of acreage and agreement to reorient the spacing unit. So both parties let that pooling order expire.

Nearburg has reproposed the well now at a 1 slightly different location in the northeast quarter, so 2 that it's standard for a stand-up east-half spacing unit. 3 So that's why we're back again today. 4 (By Mr. Kellahin) Let me turn now, Mr. Roush, to 5 Q. Exhibit Number 4. Would you identify this exhibit? 6 Yes, this is the Application that was mailed out 7 Α. to the parties. 8 All right. And again, with the exception of 9 Q. Amoco, all the interest owners notified of the hearing are 10 the same parties that you were dealing with when you 11 originally proposed the well? 12 That's correct. Α. 13 MR. KELLAHIN: That concludes my examination of 14 Mr. Roush. 15 We move the introduction of his Exhibits 1, 2, 3 16 17 and 4. Exhibits 1, 2, 3 and 4 will EXAMINER CATANACH: 18 be admitted as evidence. 19 EXAMINATION 20 BY EXAMINER CATANACH: 21 What is the status of the Arco interest within 22 Q. the unit? 23 24 They will elect to participate, or grant us a

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term assignment.

1	Q. So you have been in discussions with Amoco,
2	trying to get them to voluntarily join in the unit?
3	A. Yes, but unfortunately we didn't do it till the
4	latter stages. And I spoke with Mr. Jerry West with Amoco.
5	He is aware of what's going on.
6	We're going to attempt to try and get him
7	There's an arrangement of the Arco agreement, and I'm not
8	privy to that agreement, but should they not elect The
9	way I understand it, should they elect not to participate,
10	then I believe Arco would have the right to take their
11	percentage or their interest in the unit.
12	But having not seen the agreement, I can't give
13	you any details.
14	EXAMINER CATANACH: If you can't get Amoco to
15	waive the notice, will you anticipate having to notice
16	them, continue the case?
17	MR. KELLAHIN: Yes, sir, then we'll have to have
18	a further continuance and see where it goes from there.
19	But we're going to try to see if we can get them
20	to waive notice and provide them an opportunity to
21	participate. If that's not successful, then we'll advise
22	you.
23	EXAMINER CATANACH: We have nothing further. The
24	witness may be excused.
25	MR. KELLAHIN: My next witness, Mr. Examiner, is

1 Jerry Elger. 2 JERRY B. ELGER, the witness herein, after having been first duly sworn upon 3 4 his oath, was examined and testified as follows: DIRECT EXAMINATION 5 BY MR. KELLAHIN: 6 7 Mr. Elger, for the record, sir, would you please Q. 8 state your name and occupation? Jerry Elger. I'm an exploration geologist for 9 A. Nearburg Producing Company in Midland, Texas. 10 On prior occasions, Mr. Elger, have you testified 11 Q. and qualified before the Division as an expert in petroleum 12 13 geology? Yes, I have. 14 A. As part of your responsibilities, have you 15 prepared geologic displays concerning the opportunity 16 Nearburg sees for drilling of a deep Morrow gas test well 17 in this spacing unit? 18 19 A. Yes, I have. 20 MR. KELLAHIN: We tender Mr. Elger as an expert witness. 21 22 EXAMINER CATANACH: He is so qualified. (By Mr. Kellahin) Let's take a moment, Mr. 23 Q.

shows cum production in this area as of 1996.

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I have marked as Exhibit 5 the production map that

Take a

moment and describe for us what you see to be the offsetting productivity to the east half of 4.

A. Exhibit 5 is a production map. It identifies the gas production in the immediate area of the prospect. The spacing unit, the east half of Section 4, has been shaded yellow. The proposed location has been identified.

The legend at the bottom of the map explains what has been identified by each well. The field name has been identified, the cumulative gas production and oil production, as well as the daily rate as of May of 1996.

The blue wells and the orange wells identify the Wolfcamp and Atoka production in offset wells. You'll see there's not a very significant number of wells that have produced from this particular gas reservoir. The production from these two reservoirs is basically, in our opinion, not commercial. Those are considered secondary objectives.

- Q. When you're targeting the reservoir that has the greatest probability for potential production, which one are you looking at?
  - A. Primarily the Morrow.
- Q. And is there a particular portion of the Morrow that you see to be better potential than the others?
  - A. Yes, there is, and that's the lower Morrow.
  - Q. And you've identified that as the lower "C"

Morrow zone when we look at the isopachs?

A. That's correct. The yellow symbolism by each well, the yellow shaded areas in each well, represents those wells which have been identified as producing from the Morrow pay, but it has not been separated as to whether it's been upper, middle or lower Morrow.

What I'd like to do is -- and what I have done is transposed onto Exhibit Number 7 the -- which is an isopach specifically of the lower Morrow -- the cumulative production from this Exhibit Number 5.

What you see when you relate these two exhibits is the fact that in Section 29 to the northwest of the proposed spacing -- or proposed well, a well located in the southeast quarter of Section 29 has been identified as a well that has produced a cumulative of 34 BCF and 300,000 barrels of condensate.

To the northeast of the proposed spacing unit, in Section 25 of 17 South, 28 East, two wells have previously been drilled by Arco, and those wells have produced prolific amounts of natural gas. One well has cum'd 12 BCF, one well in excess of 15 BCF.

Also associated in that same particular area, a well in the north half of Section 36 has been identified as a well that produced 7.6 BCF from the lower Morrow sand, and a well in the south half of Section 35, a 2.5-BCF well.

- Q. On this display, you've identified three areas that you've shaded in green. The legend indicates they're areas of clean, porous sand?
- A. That's correct, with regards to the lower -- the lower Morrow "C", what we call the lower "C" Morrow zone.
- Q. When I look in that pod, if you will, of clean, porous sand, where you've proposed the location in the northeast of 4, I'm looking in that green area, and but for the well in 35 that had a cum of about 2.5 BCF I don't see any other well that's produced out of that pod.
- A. That's correct. The other wells are producing from other sands associated with the Morrow, either the upper or middle portions of the Morrow.

Again, if you refer back to those wells, in the Exhibit Number 5, you'll see that most of the wells, if they have not encountered clean, porous sand that's been identified on Exhibit Number 7, are basically for the most part noncommercial or poor wells.

- Q. Therein lies the risk, I guess, Mr. Elger?
- A. That's correct.

Q. Do you have an opinion for the Examiner as to what percentage risk factor penalty you would recommend that he include in the pooling order, in the event none of the -- in the event an interest owner elects not to participate under the pooling order?

A. Yes, I do.

- Q. And what is that recommendation?
- A. That is 200 percent.
- Q. Give us an understanding of the basis for that percentage.
- A. Again, the well in Section 3 -- The deep well control immediately surrounding this particular spacing unit, and that would be the well to the north in Section 33, a well to the east in Section 3, two wells to the west in Section 5, all of the immediate offset producers are for the most part noncommercial, from anywhere in the Pennsylvanian.
- Q. And as you move to the west and to the south, you have an absence of control as to what's happening in defining the location of any clean, porous sands?
  - A. That's correct.
- Q. Let's turn now to the cross-section that's

  Exhibit 6, so that we can see specifically what you're

  characterizing to be the lower "C" Morrow sand in relation

  to the rest of the Morrow in the area.
- A. The proposed location has been identified in the middle of the cross-section. There's two wells that tie to the northwest of the proposed location.

The well on the far left is one of the most significant wells. That particular well was drilled by

Stanolind Oil in 1953. It encountered very porous sand in the lower portion of the Morrow "C" section. That's the well that has been previously identified as the 34-BCF well. That well continues to sell gas at the rate of 1.5 million cubic feet of gas per day.

The immediate south offset to that well is a more recent well drilled by Arco Permian. That well did not find anything more than a three- or four-foot sand interval and the equivalent pay interval to the original Stanolind well. In fact, it was completed in a different sand. And in our opinion, it appears that that well is probably going to be a noncommercial well.

On the other side, to the northeast of the proposed location, I've tied two wells -- or three wells, a well in the south half of 35 that has produced 2.5 BCF from the equivalent early lower "C" Morrow section, and then it also ties the two wells in -- the well in Section 36, in the northeast northeast of 36, and the two wells I've identified earlier as the prolific producers in Section 25, also drilled by Atlantic Richfield.

The character, nature of the sand can best be described as a -- and our interpretation of the sand, is that it represents a delta mouth bar complex that has been supplied from a feeder channel system that meanders through the north part of Township 17 South, 28 East, into this

particular area and has deposited these sands in these delta-mouth, bar-type complexes.

There's enough well control for this particular body that's been identified in the far southeast corner of 17 South, 28 East, to give us a sense as to the geometry of how this thing lies in here, and our geological interpretation is that there is another similar type of clean delta mouth bar deposit that occurs in the northeast quarter of Section 4, and that is the reason that we propose that particular location.

- Q. Do you see anything on the data available to you, or based upon your experience, to tell you that this is anything other than high-risk Morrow gas exploration?
- 14 A. No.

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- MR. KELLAHIN: That concludes my examination of Mr. Elger.
- We move the introduction of his Exhibits 5, 6 and 7.
- EXAMINER CATANACH: Exhibits 5, 6 and 7 will be admitted as evidence.

## EXAMINATION

- 22 BY EXAMINER CATANACH:
  - Q. Mr. Elger, is there potential in your proposed well for anything other than the lower Morrow? I mean as far as different -- upper or middle Morrow potential?

A. Yes, there is potential. But as with the Wolfcamp and the Atoka, the Atoka -- and again, I would refer to Exhibit 5 of the production map -- the immediate offset wells in Section 3 and in Section 5 and the wells in Section 32 to the northwest are -- those three sections have Morrow wells, none of which have produced from the lower "C". They've produced from some other sand unit developed in the Morrow. And all three of those wells, in our opinion, are noncommercial, would not be targets for the cost and expense that we would incur to drill this particular well.

Q. Wolfcamp potential?

A. Again, the Wolfcamp and Atoka have both been identified on the production map, the Wolfcamp in blue, the Atoka in orange, and I believe there's a total of four — in this particular area, there's a total of four Wolfcamp producers. And you can see by each one what the production from the Wolfcamp has been, and you're looking at a 17,000-to-20,000-barrel total cumulative production range, which is definitely not commercial.

The Atoka, a similar type of reservoir, more of a gaseous reservoir than the Wolfcamp, but to date the best Atoka producer in the immediate area is a well located in Section 26, and it's produced slightly over half a BCF, which again would be noncommercial.

Those are good secondary objective targets, but 1 2 they're not anything you would drill for as a primary 3 objective. 4 Q. Have you just used well control to identify 5 that -- the pod you're drilling for? That's correct. We have no seismic in this area. 6 A. 7 EXAMINER CATANACH: I have nothing further. Anything further, Mr. Kellahin? 8 9 MR. KELLAHIN: No, sir. 10 EXAMINER CATANACH: There being nothing further, this case will be continued to February 6th --11 12 MR. KELLAHIN: Yes, sir. 13 EXAMINER CATANACH: -- at which time you'll let us know what the status is? 14 MR. KELLAHIN: Yes. 15 16 (Thereupon, these proceedings were concluded at 17 11:06 a.m.) 18 19 I do hereby certify that the foregoing is 20 a complete record of the proceedings in the Examiner hearing of Case No. 11680 21 heard by me on bavery 33 22 , Examiner (ita. 23 Oil Conservation Division 24 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 January 26th, 1997.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998