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. 12,383

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

May 4th, 2000

Santa Fe, New Mexico

10 MMY 23 AM 5: 16

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, May 4th, 2000, 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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EXHIBITS

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APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

FOR ARCH PETROLEUM, INC.:

JAMES G. BRUCE, Attorney at Law 3304 Camino Lisa Santa Fe, New Mexico 87501 P.O. Box 1056 Santa Fe, New Mexico 87504

* * *

1	WHEREUPON, the following proceedings were had at
2	10:22 a.m.:
3	EXAMINER CATANACH: At this time we'll call Case
4	12,383, the Application of Nearburg Exploration Company,
5	L.L.C., for compulsory pooling, Eddy County, New Mexico.
6	Call for appearances in this case.
7	MR. CARR: May it please the Examiner, my name is
8	William F. Carr with the Santa Fe law firm Campbell, Carr,
9	Berge and Sheridan. We represent Nearburg Exploration,
10	L.L.C., and I have two witnesses.
11	EXAMINER CATANACH: Are there any additional
12	appearances?
13	MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
14	representing Arch Petroleum, Incorporated. I have no
15	witnesses.
16	EXAMINER CATANACH: Okay, will the witnesses
17	please stand to be sworn in?
18	(Thereupon, the witnesses were sworn.)
19	MARK WHEELER,
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. CARR:
24	Q. Would you state your name for the record, please?
25	A. Mark Wheeler.

Mr. Wheeler, where do you reside? Q. 1 Midland, Texas. 2 Α. By whom are you employed? 3 Q. Nearburg Exploration Company, L.L.C. 4 Α. And what is your position with Nearburg 5 Q. Exploration Company? 6 Senior landman. 7 Α. Have you previously testified before this 8 Division? 9 10 Α. Yes, I have. At the time of that testimony, were your 11 12 credentials as an expert in petroleum land matters accepted and made a matter of record? 13 Yes, sir. 14 Α. Are you familiar with the Application filed in 15 this case? 16 Yes, sir. 17 Α. And are you familiar with the status of the lands 18 in the subject area? 19 Yes, I am. 20 Α. 21 MR. CARR: Are Mr. Wheeler's qualifications 22 acceptable? EXAMINER CATANACH: They are. 23 (By Mr. Carr) Would you briefly summarize for 24 Mr. Catanach what it is that Nearburg seeks in this case? 25

- A. Nearburg seeks an order pooling all minerals from the surface to the base of the Morrow formation in the east half of Section 24, Township 18 South, Range 26 East, Eddy County, New Mexico.
- Q. Are there secondary horizons that you also need to pool?
- A. Yes, we would like to pool the east half for all formations or pools developed on 320-acre spacing, including the Red Lake-Pennsylvanian Gas Pool, the southeast quarter for all formations developed on 160-acre spacing, and the northeast quarter of the southeast quarter for all formations or pools developed on 40-acre spacing.
- Q. And the name of the well to which you propose to dedicate these spacing units?
 - A. The Rio Pecos 24 Number 1 well.
 - O. Will that be drilled at a standard location?
- A. Yes, it will.

- Q. Would you identify and review for Mr. Catanach Nearburg Exhibit Number 1?
- A. Exhibit 1 is a land plat showing the 320-acre spacing unit for this proposed well. It shows the proposed well location at 660 feet from the east line and 1650 feet from the south line of Section 24, and it shows the ownership in the area.
 - Q. What is the status of the acreage in the east

half of Section 24?

- A. It's all fee acreage.
- Q. And the primary objective in this well is what formation?
- A. The Morrow formation in the Red Lake-Pennsylvanian Gas Pool.
- Q. Let's go to Nearburg Exhibit Number 2, and I'd ask you to identify this and review it for Mr. Catanach.
- A. This is an ownership breakdown of the east half of Section 24.

As you can tell, Nearburg currently has approximately 46.36 percent, and others 53.64 percent.

- Q. What percentage of the working interest is voluntarily committed to the well at this time?
 - A. Approximately 58 percent.
- Q. And could you identify those owners who will be subject to this pooling Application?
 - A. Arch Petroleum, Texacal Oil and Gas, Winnie Clayton Truesdell, Eddie Peoples and Mariene Counts.
- Q. I'd ask you now to refer to Nearburg Exhibit

 Number 3 and summarize the efforts you have made to obtain
 the voluntary participation of all interest owners in this
 well.
- A. We first sent out a proposal to Pogo, which is the parent company of Arch Petroleum, on December 16th of

1999, proposing a trade of acreage and a farmout. And subsequent to that letter, we sent out our original AFEs on February 10th of 2000 to Pogo/Arch and all the other mineral owners in the are that we had not acquired at that time.

We forwarded our joint operating agreement on February 15th, 2000, to those same owners. And in Exhibit 3 we received back quite a number of signed AFEs, and I've included all of those from the parties that have agreed to participate or farm out to us.

And we've still not reached agreement with the parties that I've just named.

- Q. In your opinion, have you made a good-faith effort to identify and obtain the voluntary participation of all interest owners in this well?
 - A. Yes, sir.

- Q. Now, would you refer to what has been marked Exhibit Number 4 -- it's a letter dated April 24, 2000, to various interest owners -- and identify this exhibit and the attachments?
 - A. My copy does not have the exhibit number.

The April 24th letter is from Yates to us, agreeing to participate, and we've also attached to that other signatures from some of the other parties. Not all of them, because there are some other ones that we got

prior to this date. 1 Is this the AFE you're discussing? 2 Q. Yes, sir. 3 Α. And this is the AFE that Nearburg will use for 4 Q. 5 the proposed well? Α. Yes, sir. 6 7 Could you review the totals as set forth on that Q. AFE? 8 The dryhole cost is \$470,406, completed well cost 9 \$802,274. 10 Are these costs consistent with the costs 11 Q. incurred in drilling similar wells in this area? 12 Α. Yes, sir. 13 Have you made an estimate of the overhead and 14 Q. administrative costs to be incurred while drilling the well 15 and also while producing it if, in fact, it is successful? 16 Yes, sir, \$5485 per month during the drilling and 17 Α. \$600 a month during the producing phase. 18 And what is the basis for these figures? 19 Q. The Ernst and Young 1999 survey, adjusted for. 20 Α. Are these costs in line with what are charged for 21 Q. other wells recently drilled in the area? 22 Yes, sir. 23 Α. And do you recommend that these figures be 24

incorporated into the order which results from this

hearing?

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- Q. Does Nearburg request that the overhead figures approved by the Division be subject to adjustment in accordance with COPAS guideline applicable to all interest
- 6 owners in the well?

Yes, sir.

- 7 A. Yes, sir.
 - Q. Is Exhibit Number 5 an affidavit confirming that notice of today's hearing has been provided in accordance with Oil Conservation Division rules and regulations?
- 11 A. Yes, sir, it is.
- Q. Were all those interest owners who will be subject to a pooling order notified of today's hearing?
- 14 A. Yes, sir.
- Q. Does Nearburg Producing Company seek to be designated operator of the proposed well?
- 17 A. Yes, sir.
 - Q. How soon does Nearburg plan to commence the drilling of this well?
 - A. Within 90 days of an order.
- Q. Were Exhibits 1 through 5 either prepared by you or compiled under your direction and supervision?
 - A. Yes, sir.
- MR. CARR: Mr. Catanach, at this time we move the admission into evidence of Nearburg Exhibits 1 through 5.

EXAMINER CATANACH: Exhibits 1 through 5 will be 1 2 admitted as evidence. MR. CARR: That concludes my direct examination 3 of Mr. Wheeler. 4 EXAMINER CATANACH: Any questions, Mr. Bruce? 5 MR. BRUCE: No, sir. 6 7 **EXAMINATION** 8 BY EXAMINER CATANACH: 9 Mr. Wheeler, you actually sent off the AFE on 10 February 10th? Α. Yes, sir. 11 And that is to all the interest owners? 12 13 All the ones that at that time were not leased or that we had acquired agreements with, yes, sir. 14 Okay. And you were able to locate all these 15 Q. interest owners, right? 16 Actually, if you look on Exhibit 2, the ownership 17 list, the parties that say "returned", there are three 18 minor parties at the bottom that say "returned". 19 We sent out an AFE to the last known address that 20 we had for those people, and those were returned to us 21 undelivered. 22 We attempted through Internet and other means to 23 determine a new address for those people and were unable to 24 25 locate them, so we did send it to the last known address

that we had.

One of the individuals is actually incarcerated, so -- that we're aware of, in Huntsville, Texas.

- Q. And you were unable to get ahold of him?
- A. We -- Unable to get ahold of him?
- Q. Yeah.
- A. It's my understanding that in Texas he can't execute anything while he's in jail.
 - Q. I see.
- A. So even if he wanted to participate, he can't execute our AFE or any kind of agreement. So we'll have to hold his interest in escrow until such time as the order -- the payout is reached.
- Q. So the Counts and the Truesdell and the Peoples interests you could not locate?
- A. That's correct.
- Q. And where did you obtain the last known address for those people?
- A. There was some information in the county records, showing the last known address when they did execute a lease or some sort of instrument in the county records, and we forward it to those addresses.
- Q. Are you confident that you've exhausted your available means to locate these people?
 - A. Yes, sir.

Actually, these people were also involved in 1 another well in the area, and we've been working on that 2 well even longer than this one, and we've been unable to 3 locate them there also. 4 Do you anticipate any of the other interest 5 owners agreeing to your proposal? 6 7 I actually have a verbal trade made with Arch Petroleum for a farmout of their interest into Nearburg, 8 but we have not actually received the signed farmout 9 10 agreement, so we should have that interest. 11 And I do not know what Texacal is going to do. 12 They just have not responded to anything. They received 13 the letter, but they have not responded in any way. 14 Okay. The well location, that has been approved, Q. 15 as far as you know? It has been staked, and since it's fee land, I 16 don't think that there will be any stipula- -- There's no 17 arc or any BLM approval required there, so... 18 You don't think that will be moved for any 19 Q. 20 reason? No, sir, this is a fairly flat area, so I don't 21 22 think there will be any reason to change it. 23 EXAMINER CATANACH: Okay. That's all I have. 24 This witness may be excused.

MR. CARR: At this time we call Mr. Elger.

1	JERRY B. ELGER,		
2	the witness herein, after having been first duly sworn upon		
3	his oath, was examined and testified as follows:		
4	DIRECT EXAMINATION		
5	BY MR. CARR:		
6	Q. Would you state your name for the record, please?		
7	A. Jerry Elger.		
8	Q. Where do you reside?		
9	A. Midland, Texas.		
10	Q. By whom are you employed?		
11	A. Nearburg Producing Company.		
12	Q. And what is your position with Nearburg?		
13	A. Geologist.		
14	Q. Mr. Elger, have you previously testified before		
15	this Division and had your credentials as an expert in		
16	petroleum geology accepted and made a matter of record?		
17	A. Yes, I have.		
18	Q. Are you familiar with the Application filed in		
19	this case?		
20	A. Yes, I am.		
21	Q. Have you made a geological study of the area		
22	which is the subject of this hearing?		
23	A. Yes, I have.		
24	Q. Are you prepared to share the results of that		
25	work with the Examiner?		

A. Yes.

MR. CARR: Are Mr. Elger's qualifications acceptable?

EXAMINER CATANACH: They are.

- Q. (By Mr. Carr) Would you refer to what has been marked for identification as Nearburg Exploration Company Exhibit Number 6, the structure map, and review this for Mr. Catanach?
- A. Exhibit Number 6 is a structure map, a combination structure and production map. It has structure contours that are utilizing the base of the lower Morrow as the structural datum. The structure shows dip of approximately 100 feet per mile to the southeast. It's basically regional dip.

And the production is identified in the legend. The red-shaded hexagons are Morrow producers, purple are Abo producers, and then the light blue are Seven Rivers-Queen-Grayburg-San Andres producers.

This map also shows the trace of a cross-section, A-A', which extends from the north of the proposed drill site to the proposed drill site in the east half of Section 24. The spacing unit for the proposed Rio Pecos 24 well is the green outlined box, encompassing the east half of Section 24, and then the trace of the cross-section goes down to and ties wells, four wells, to the south of the

proposed location.

- Q. Let's go to Nearburg Exhibit Number 7, your cross-section. I'd ask you to review that for Mr. Catanach.
- A. Exhibit Number 7 is a Morrow stratigraphic cross-section, again, the trace of which we identified on Exhibit 6. It's basically a north-south cross-section. It includes both the Atoka section as well as the Morrow, and it ties a number of key wells both north and south of the proposed drill site.

Two main sands are identified and colored that extend across all of the wells on this cross-section, and those two sands are named the lower "B" sand and the upper "C" sand. Those are the two target sands for the Rio Pecos 24 Number 1.

As you can see, those sands are present in virtually all of the wells included on this cross-section, although to the south there's a number of wells in which the Morrow upper "C" section was production tested or drill stem tested and was shown to be water-bearing. In fact, all four of the wells to the right-hand side of the proposed location production tested or drill stem tested the Morrow upper "C" sand and were noncommercial from that unit.

The well on the far left at A, the Kewanee

Feather Number 1, was productive in what appears to be the equivalent sand to -- in the upper "C", and that was a good, commercial well.

The lower "B" sand appears to be present but rather silty and low porosity in the Feather well, in the Read and Stevens Fair Number 1 well, in the Yates Northwestern Shores "ADL" well, and then it was perforated in the Yates Northwestern Shores "XR" Fed Number 1 well, and it was not tested in the Read and Stevens Scoggins deep unit well.

That sand -- I believe when we look at the next two exhibits, in the upper -- the lower "B" sand exhibit, what we'll see is that the majority of these wells are located at what I consider to be -- interpret as the edge of a lower "B" sand system, which basically runs north-south and overlays a north-south-oriented Morrow upper "C" channel system.

- Q. Let's go to what has been marked Nearburg Exhibit Number 8, the net sand isopach on the Morrow "B". Could you review that for Mr. Catanach?
- A. The Morrow "B" sand, again, is what has been identified on this cross-section as the lower "B" sand, the brightly yellow-shaded interval.

On this particular display, wells that have been completed from the Morrow "B" sand or this lower "B" sand

package, the hexagonals around those wellbores have been shaded red. You'll see that there's two wells in Section 13 to the north of the proposed location that are productive from this lower "B" sand.

The well in the same half section as the spacing unit for our Rio Pecos 24 well was also perforated in this lower "B" sand interval. That well -- refer back to Exhibit Number 6 -- produced a cumulative of about one-third of a BCF from this lower "B" sand interval.

Wells that are included on the cross-section, or not -- to the south of our proposed location in 24 have been shaded yellow on this particular display, and the yellow indicates that in my opinion, based on the fact that -- either lack of production tests or through production tests or drill stem tests, those wells encountered the lower "B" nonproductive, nonreservoir quality sand.

The numbers by each one of the individual wells represents, using an eight-percent porosity cutoff, the net feet of porosity within the gross interval of this particular lower "B" sand interval.

So you can see that there's quite a number of wells to the south of our proposed spacing unit that have fairly thick lower "B" sand but relatively low porosity.

Q. Let's go now to the Morrow upper "C" sand, Exhibit Number 9. Would you review that?

A. Exhibit Number 9 is basically the same legend as the lower "B" Exhibit. Wells that were productive from the upper "C" sand have been identified by the red hexagonals around the wellbores.

You can see again, there's a well in the east half of 13 and two wells in the west half of 18 to the north of the proposed location that have perforated and produced from this upper "C" sand interval. And again, wells that have had either drill stem tests or production test gas shows from the upper "C" but were nonproductive are shaded half red on this particular -- half red and half blue.

And we see a well in Section 30, which is the Read and Stevens Fair Number 1 well on this cross-section, and the well in the south half of 25, which is the Yates Northwestern Shores "ADL" Com Number 1 well, which also production tested this upper "C" sand, had gas shows, but was mainly water-bearing.

Based on the fact that we have what appears to be a north-south oriented stream channel in the upper "C" and the fact that it becomes evident through all of the testing that's been done in 30 and 25 and to the south, that the sand contains -- becomes water-bearing at some point as you progress to the south. Therefore, with the gas shows in those two wells in 30 and 25 that I've talked about, we

think those wells -- the gas shows indicate that those wells are in proximity to a gas-water contact.

If that's the case, then what I've done is taken the trace of the lower Morrow structure map and displayed that on the isopach map and assumed that any wells south of the trace of that structural contour are more than likely water- -- the reservoir would be more than likely water- bearing. And north of it, as you move updip, would be gasbearing.

And therefore, we have positioned our well in Section 24 to encounter both what we hope will be productive-quality reservoir rock in both the "B" zone and the "C" zone and get the -- capture potential gas reserves in the "C" zone above the gas-water contact that's been identified.

- Q. Are you prepared to make a recommendation to the Examiner as to the risk penalty that should be assessed against any interest owner who does not voluntarily participate in the well?
 - A. Yes, I am.

- Q. And what do you recommend?
- A. I would recommend 200 percent.
- Q. Briefly summarize the basis for that recommendation.
 - A. Again, there are a number of wells that have been

drilled in this area, in 24, in 19. If you can refer to the production map, again, 25 there's been two wells, 36 there's been two wells, 31 there's been a well, 30 there's been two wells.

All of those wells have encountered basically noncommercial -- or are noncommercial from the Morrow. And although each of these individual isopachs portrays my interpretation of north-south oriented stream events, we know from previous history that these things can have a tendency to do a meandering, and we could encounter nonreservoir rock.

In addition, we have -- This is not an area that's very conducive to seismic work, and therefore we have no seismic, so we're justifying our locations, picking our locations on the basis solely of subsurface, the projection of these channels and what we hope will be -- the subsurface control is telling us will be productive fairways.

- Q. In your opinion, will approval of this

 Application and the drilling of the well at the proposed location be in the best interest of conservation, the prevention of waste and the protection of correlative rights?
- A. Yes.

Q. How soon does Nearburg plan to commence the

22 drilling of this well? 1 I believe Mark answered that was 90 days. 2 Α. Were Exhibits 6 through 8 prepared by you or Q. 3 compiled under your direction? 4 5 Α. Yes, they were. MR. CARR: May it please the Examiner, at this 6 7 time we would move the admission into evidence of Nearburg 8 Exhibits 6 through 8. 9 EXAMINER CATANACH: Exhibits 6 through 8 will be 10 admitted as evidence. MR. CARR: And that concludes my direct 11 examination of Mr. Elger. 12 13 EXAMINER CATANACH: Mr. Bruce, do you have any questions of this witness? 14 15 MR. BRUCE: No questions. EXAMINATION 16 BY EXAMINER CATANACH: 17 Mr. Elger, just one. Again, how did you base the 18 Q. 19 location of what you -- of the gas-water contact you've 20 plotted? It's primarily on the basis of the production Α. 21 test that occurred in the Read and Stevens Fair Number 1. 22

You can see they encountered a very porous, high-quality

reservoir sand in the upper "C" interval. They actually

ran casing on that well and perforated the very top

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interval, the very top -- I believe it's eight feet -- of that sand.

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Upon perforating that sand, they immediately had a gas and water flow to surface, in five minutes, and it flowed at the gauges that are displayed at the base of the log, indicating again that they had excellent reservoir, but they were producing a combination of gas and water.

And likewise with the Yates well immediately adjacent to that. And if you look at those two wells on the structure map, those two wells are basically flat to each other. There's very little structural difference between those two wells.

Well, what I assumed was that in order to see the types of gas shows reported, that the very top of this sand would have to have encountered maybe a partial gas-water contact. So the top of the sand reservoir in each one of these particular wells is very close to that gas-water contact. And we know from the structure map what the orientation of the dip-and-strike orientations are.

So I just traced, just immediately north of where those wellbores were, the trace of the structure overlaid on the isopach map and assumed that that would represent very close proximity to a gas-water contact and that as you progress updip, you're liable to get more and more of this reservoir above -- the reservoir containing more gas and

less water as you walked updip. 1 And we're walking updip, as you can see on the 2 structure map, from this Read and Stevens Fair well. We're 3 estimating that will be close to 100 feet structurally high to that well. And that would be plenty of structural 5 advantage over the Read and Stevens Fair well to move this 6 entire sandbody well above -- well up into a gas section. 7 EXAMINER CATANACH: Okay, I have nothing further 8 9 of the witness. 10 MR. CARR: That concludes our presentation in this case. 11 12 EXAMINER CATANACH: There being nothing further in this case, Case 12,383 will be taken under advisement. 13 (Thereupon, these proceedings were concluded at 14 10:52 a.m.) 15 16 17 18 19 20 I see the six consist ment the inver-21 22 23 Of Conservation Division 24 25

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)

(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 May 11th, 2000.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002