

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date OCTOBER 30, 1974 TIME: 9 A M.

| NAME | REPRESENTING | LOCATION |
|---|--------------------------------|-------------------------|
| <i>Justin W. Mewhaune</i> | <i>Mark Production Company</i> | <i>Tyler, Texas</i> |
| <i>Tom Kellahin</i> | <i>Kellahin & Fox</i> | <i>Santa Fe</i> |
| <i>George E. Darin</i> | <i>Citico Service Oil</i> | <i>Midland, Tex.</i> |
| <i>Dan KERNAGHAN</i> | <i>ANADARCO Prod. Co.</i> | <i>Houston</i> |
| <i>Victor T. Lyon</i> | <i>Continental Oil Co</i> | <i>Hobbs</i> |
| <i>D. Loeel</i> | <i>Loeel & Pearson</i> | <i>Artesia</i> |
| <i>Ray Beck</i> | <i>Yates Petroleum</i> | <i>Artesia</i> |
| <i>Nick Frankl</i> | <i>Corinne Grace</i> | <i>Albq.</i> |
| <i>Dave Bentzen</i> | <i>Corinne Grace</i> | <i>Littleton, Colo.</i> |
| <i>Case 5349</i> <i>Grace - Unit Agreement</i> | | |

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 30, 1974

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Corinne Grace for a)
unit agreement, Eddy, County, New)
Mexico.)
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CASE 5349

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil William Carr, Esq.
Conservation Commission: Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant: Nick Franklin, Esq.
LAMB, METZGAR, FRANKLIN & LYONS
Albuquerque, New Mexico

I N D E X

DAVE BENTZIN

Direct Examination by Mr. Franklin
Cross Examination by Mr. Nutter

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Exhibits 1 and 2

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MR. NUTTER: The hearing will come to order, please. The first case this afternoon will be Case No. 5349.

MR. CARR: Case 5349, Application of Corinne Grace for a unit agreement, Eddy County, New Mexico.

MR. NUTTER: Call for appearances.

MR. FRANKLIN: Nick Franklin, law firm of Lamb, Metzgar, Franklin and Lyons, Albuquerque, New Mexico, representing Corinne Grace.

MR. CARR: How many witnesses do you have, Mr. Franklin?

MR. FRANKLIN: We just have one. We have Mr. Dave Bentzin, B-E-N-T-Z-I-N, who is a consulting geologist.

(Whereupon, the witness was duly sworn.)

DAVE BENTZIN

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. FRANKLIN:

Q Will you please state your name and address?

A My name is David A. Bentzin, 5844 South Prescott, Littleton, Colorado.

Q What is your profession?

A I am a consulting petroleum geologist.

Q Have you testified before the OCC in New Mexico before?

A No, I have not.

Q All right. Mr. Bentzin, how long have you been in the consulting geology business?

A I have been a consultant for one year, and I have been in exploration geology continuously since 1960.

Q Is there any one area of specialty that you have been involved in?

A Petroleum exploration geology.

Q All right. Now, have you ever been called as an expert witness in any other state in relation to oil conservation problems and so forth?

A Yes, I have. I have appeared before the Montana Oil and Gas Commission on spacing matters; and I have appeared before the Wyoming Oil and Gas Commission on at least a half-a-dozen times on spacing and unit matters.

Q Can you briefly explain your academic background?

A I have Bachelor of Science Degree in geology from the University of Wisconsin, and a Master of Science Degree from the University of Montana.

Q Did you have an opportunity to consult as a

professional geologist for Corinne Grace in this proposed Bond Draw Unit now before the OCC?

A Yes, I have. I did all of their geology relative to this Unit and have done the geology for other units in the Delaware Basin, specifically Livingston Ridge, and Quahada Unit.

Q Did you bring with you the unit agreement with regard to this particular unit?

A Yes, I have.

Q Can you, in general terms, review that for the Commission?

A The unit agreement, would you like one copy or two?

MR. NUTTER: Two copies, please.

A (Continuing) The unit agreement --

MR. NUTTER: (Interrupting) This should be identified as an exhibit.

(Whereupon, the unit agreement was marked as an exhibit for identification.)

A (Continuing) The unit agreement has been prepared from the standard Federal form for unit agreements with provisions made for the State of New Mexico land and patented land.

Q Would you review any of the terms in the agreement that you would like?

A The agreement provides for the control by the Secretary of the Interior and by the New Mexico Oil Conservation Commission in order to protect the rights of the lessors in the case of Federal land, patented land, and State land.

Q All right. Now, Exhibit A to the unit agreement describes the area proposed for unitization; can you geologically summarize the area for us and show the Examiner exactly what we are talking about?

A Yes, I can. Would you like me to wait until you have reviewed the terms of the agreement?

MR. NUTTER: No, go ahead.

A (Continuing) All right. You will find on the back and Exhibit A, I have an enlarged copy here and you will find that the Exhibit A is eight full sections, and it comprises lands in Eddy County, in Township 24 South, Range 27 East; all of Sections 2, 3, 10, 11, 14, 15, 22, and 23. You will also note that this is 120 acres of Federal land, 4,203.11 acres of State land, and 800 acres of patented land. By far the greatest percentage, some 82 percent, is State of New Mexico land.

Geologically this area is on the north side of the

Delaware Basin, and it is located south of the city of Carlsbad, New Mexico. I have prepared geologic exhibits in order that we might justify the location of this unit. Will three copies be sufficient?

MR. FRANKLIN: I would ask that this be marked as Exhibit 2; I presume it hasn't been.

MR. NUTTER: If this hasn't been identified, it would be your Exhibit No. 1.

MR. FRANKLIN: Exhibit No. 1 would be the unit agreement which we have presented.

MR. CARR: Your attachments thereto are A.

MR. FRANKLIN: Exhibit A and Exhibit B.

MR. CARR: Okay.

MR. NUTTER: Portions of Exhibit 1.

MR. FRANKLIN: This would be Exhibit 2.

A (Continuing) Exhibit 2 has as the first page, a geologic description and justification of the unit area. The second page has a geologic map which was prepared by myself from a study of the geology of this area and the surrounding area; and page three is a cross section going from the Mobil No. 1 Pardue Farms in Section 31, Township 23 South, Range 28 East, on the east to the Union Oil No. 1 Crawford in Section 9, Township 24 South, Range 27 East on

the west. You will note on the cross section that we intend to drill down to the Barnett shale in order to test all beds in the Morrow sand of Pennsylvanian age. On the cross section you will see that we have four possibly productive sands. The control for all of these sands is in the Mobil Oil well. Now, the upper two sands are in what is called the Morrow B zone. Those sands are marine sands, they have an irregular areal extent, and they may very well occur anywhere over the unit area updip from the Mobil Pardue Farms, and specifically we have shown of gas and condensate in those wells. In the lower two sands, which is in the Morrow C zone, we have a shoreline-type configuration. Regional considerations tell us that these sands will run northeast-southwest. They are so drawn on the geologic exhibit. I have put the two sands in different locations, dependent upon the character of the sands as found in the Mobil well, and in the Union well. The upper sands, for example, in the Mobil well, have good porosity, and therefore the well is in the middle of the sand bar. The lower sand in the Mobil well does not have good porosity, but it did have gas shows, and it is somewhat developed in the Union well, although still tight, and so we believe that it may develop porosity between the two wells.

MR. NUTTER: Would that be the one you call the basal sand on the geological map?

A (Continuing) Yes, the basal sand of the Morrow C Zone. So, we see then that we have four prospective pay horizons identified by shows of condensate and/or gas in the Mobil Well. We have in the Union Well, poor or complete lack of development of those sands. I might also point out that in the Tenneco No. 1 Kelly-State B in Section 27 of Township 47 South, Range 27 East, as far as that well penetrated into the Morrow we did not have a good development of the Morrow B sands. Amazingly enough, that well did not penetrate the Morrow C sands, so we do not have control. The deep test in the sections to the south, the Tenneco No. 1 Kelly-State A in Section 34 of Township 24 South, Range 27 East, did not penetrate the Morrow at all. Its total depth was in the Cisco above the Morrow where it was completed as a gas well. At the time that this well was completed, and at the time that it was held for possible completion, the only gas produced out of that well was enough to drill the well to the north. No gas was ever sold to the general market for lack of pipeline. This information has come from your Commission records in Artesia, therefore, we will see on the map then, that the proposed-unit area of eight

sections does have two sands that we can map and postulate into the area. We have two other sands that I have not presumed to draw an outline for because of their irregular marine sand outline, and so I believe that this unit geologically is a reasonable area to space for unitization.

Now, the fourth page on our Exhibit 2 is simply a reproduction of Exhibit A to the unit agreement, and you will note that the ownership varies through the unit and, therefore, because we are looking for possible gas production we feel that it will be in the best interest of the State of New Mexico for conservation, and we feel that it will be in the best interest of the diverse land holdings, both lessee and lessor for a single unit operator. Therefore, we propose that the Bond Draw Unit outlined be accepted, and that the unit test well be declared a test into the Barnett shale to test all beds of Pennsylvanian age.

Are there any questions?

Q Let me ask one more question. On the basis of what you have just said, and I think stated another way, on the basis of your investigation and your research, as well as your background experience that approval of such an agreement will tend to promote the conservation of oil and gas, and a better resolution of resource energy, reservoir

energy in New Mexico.

A Yes, I believe that.

MR. FRANKLIN: I have no other questions.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Bentzin, all formations here are unitized, is this correct?

A That is correct.

Q Okay, now, I note Section 9 of the unit agreement calls for the drilling of a well down to the Barnett shale, but it doesn't specify where the well will be drilled; has a determination of that been made yet?

A No, it has not.

Q So you don't have any idea where this well is going to be yet?

A No, negotiations are taking place for a location on lands not presently owned or controlled by the proposed unit operator, Corinne Grace. If those negotiations fail, then the unit would be on one of the three parcels that are currently under lease by either Corinne Grace or M. P. Grace.

Q Now, there is considerable State land involved here; has the State Land Office given its tentative approval

to the formation of this unit?

A No, it has not.

Q Has the USGS given its tentative approval to the formation of the unit yet?

A No, it has not.

Q Okay. Now, there are other working-interest owners in the unit besides the applicant, Mrs. Grace, and Michael P. Grace, but have any of these other working-interest owners committed their acreage to the unit as of now?

A No, they have not.

Q So this is still prospective as far as other working-interest owners and the royalty owners?

A That is correct. We are seeking approval of the unit area by both the, or by all, the Oil Conservation Commission and the State of New Mexico, the State Land Office, and by the U. S. Geological Survey prior to contacting the other working-interest owners for joinder.

Q I see.

MR. NUTTER: Does anyone else have any questions of Mr. Bentzin? He may be excused.

Do you have anything further, Mr. Franklin?

MR. FRANKLIN: No, that's it.

MR. NUTTER: Does anyone have anything they wish to offer in Case 5349? We will take the Case under advisement and the hearing is adjourned.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Richard L. Nye
RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5349, heard by me on 10/30, 1974.

_____, Examiner
New Mexico Oil Conservation Commission

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