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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico November 13, 1974 EXAMINER HEARING IN THE MATTER OF: Application of Robert N. Enfield for) CASE 5366 a unit agreement, Eddy County, New Mexico. BEFORE: Richard L. Stamets, Examiner. TRANSCRIPT OF HEARING <u>A P P E A R A N C E S</u> For the New Mexico Oil William F. Carr, Esq. Conservation Commission: Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico For the Applicant: Paul Eaton, Esq. HINKLE, BONDURANT, COX & EATON Roswell, New Mexico THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386

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EXHIBITS

Applicant's Exhibits 1 through 5

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MR. STAMETS: The hearing will come to order, please, we will call the next Case 5366.

MR. CARR: Case 5366, application of Robert N. Enfield for a unit agreement, Eddy County, New Mexico.

MR. EATON: Paul Eaton of the firm of Hinkle, Bondurant, Cox and Eaton representing the Applicant. We have two witnesses.

MR. STAMETS: They will stand and be sworn, please.

(Whereupon, the witnesses were duly sworn.)

ROBERT N. ENFIELD

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

DIRECT EXAMINATION

BY MR. EATON:

Q State your name, residence, and your business?

A Robert N. Enfield, Independent Oil Operator, Santa Fe, New Mexico.

Q Are you the applicant in this Case?

A Yes.

Q What do you seek by your application?

A The formation of an exploratory unit, Eddy County, New Mexico.

> THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET

SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386 Q Have you prepared a plat showing the outline of the proposed unit area?

A Yes, I have.

Q That plat is identified as Exhibit No. 1?

A Yes.

Q Mr. Enfield, does that plat show the lease-hold ownership?

A Yes, it does.

Q What is the break down by acreage of the type of ownership in the proposed unit?

A Approximately -- may I look at that?

Q Sure.

A Two hundred and forty acres of fee land, 3,593.48 acres of Federal land; 93.7 percent Federal and 6.3 percent fee lands.

Q Or a total of 3,833.48 acres, is that correct?

A Correct.

Q Which amends our application, I think there was a minor -- the application shows, states that the unit area contains 3,813.48 acres, that's an error, is that correct? MR. STAMETS: What was the new figure?

MR. EATON: 3,833.48 acres.

BY MR. EATON:

Q Mr. Enfield, have you made application to the United States Geological Survey for designation of the Cottonwood Draw Unit Area as logically subject to exploration and development?

A Yes, I have.

Q Has this requested land been designated a geological unit area?

A Yes, it has.

Q Is the designation by the USGS reflected by Exhibit No. 2?

A Correct, it is a letter from them approving this.Q Has the unit agreement been prepared by you?

A Under my direction.

Q Is Exhibit No. 3 a copy of the proposed unit agreement?

A Yes.

Q Has this form of agreement previously been approved by the United States Geological Survey and this Commission?

A Yes, it's a standard form.

Q Who is designated as unit operator?

A Robert N. Enfield.

Q Are all formations unitized?A Yes.

Q I note that in the application to this Commission, we state that all formations down to the basic Pennsylvanian formation are being unitized; is that statement in the application incorrect?

A Yes, it is incorrect; we are unitizing all formations, not just the Penn.

Q What are the provisions for the initial test well?

A To be drilled to a depth of 12,900 feet and to adequately test the Morrow sands.

Q What is the plan of development after completion of the well?

A It is a regular six-month plan of development as is standard in the unit agreement.

Q What is the present status of commitment of acreage to the unit agreement?

A Approximately 90 percent of the working interest is committed. The only person who is not committed is Michael P. Grace, who has not answered.

Q Is this sufficient acreage to afford effective control of the unit operations?

A Yes, I feel so.

Q Will Mr. David testify as to geological considerations?

A Yes.

Q In your opinion, will the proposed unit promote the prevention of waste and the protection of correlative rights?

A Yes, it will.

MR. EATON: I have no further questions.

Q Oh, yes, were Exhibits one and three prepared by you or under your direction?

A Yes, they were.

MR. EATON: I have no further questions.

MR. STAMETS: Are there any other questions of the witness? You may be excused.

EDWARD K. DAVID

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

DIRECT EXAMINATION

BY MR. EATON:

Q State your name, residence and occupation? A Edward K. David, I reside in Roswell, New Mexico, and I am a consulting geologist.

Q Have you previously testified in that capacity before this Commission?

A Yes, I have.

Q And, were your qualifications acceptable?

A Yes, they were.

Q Are you familiar with the application of Mr. Enfield?

A Yes, I am.

Q Are you familiar with the region and the specific area in which the proposed Cottonwood Draw Unit is to be located?

A Yes, I did the geology on it under the direction of Mr. Enfield.

Q Have you prepared exhibits for introduction in this Case?

A Yes, I have prepared the Exhibit 4 and Exhibit 5.

Q Referring to Exhibit 4, what does that exhibit portray?

A This is a subsurface structure map and the vicinity surrounding the Cottonwood Draw Unit area. This particular map is contoured upon the Morrow A sand which is defined as the uppermost Morrow sand and is shown as such on Exhibit 5, the cross section. This map is contoured on a

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250-foot contour interval, the scale is one inch to a mile, and this particular map encompasses in the northwest corner the White City structure in association with the Crawford-Morrow field which is a closed Morrow structure. And, from the evidence in here and the regional trends in this general area, either extend in a north-south alignment or northwest-southeast alignment, and based on this interpretation we feel there is a structural trend extending to the southeast from the White City structure, and that in the vicinity of the proposed unit we have a possibility of a closed structure on the Morrow level.

Q All right. Would you refer to Exhibit 5 and state what that exhibit is?

A This is a cross section running in a north-south direction. The well on the left is the northernmost well, and is shown -- the trace of this particular cross section is shown on Exhibit 4. The northernmost well is the Humble No. 1 Federal-Whigs; it is located in Section 31, Township 24 South, Range 27 East, and the well on the right is the southernmost well, which is the El Paso-Welch Unit located in Section 21, Township 26 South, Range 27 East. Based on this, the datum on this particular cross section is the Morrow A sand. Shown in yellow is a sand which is

correlative in both wells, and both wells encountered hydrocarbons in this particular zone. As we can see on the northernmost well, the Humble well, on completion attempts it flowed up to 128 barrels of oil, 440,000 cubic feet of gas, and 110 barrels of water in 24 hours. The well to the south, the El Paso well, was actually completed out of this zone, and this zone as well as some of the zones up the hole produced 774,378,000 cubic feet of gas up to the plug and abandonment in 1964.

Q I take it that the Morrow is the primary objective?

A That is correct. The Morrow would be the primary objective and the primary reason for drilling this particular wildcat.

Q Are there any secondary objectives in the unit area?

A Yes, there are. Moving up the hole we have the Strawn which we consider a good possibility at approximately 10,600 feet. We also have the same possibilities of Wolfcamp which would occur below 8900 feet, and the shallowest zone would be Delaware sand at approximately 2,070 feet.

Q Were Exhibits 4 and 5 prepared by you, Mr. David?A That is correct.

MR. EATON: Mr. Examiner, we move the admission of

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Exhibits 1, 2, 3, 4 and 5 into evidence. We have no further questions of Mr. David. We ask that the Commission consider the application amended to show the Unit area containing 3,833.48 acres, and further amended to show that all formations are being unitized.

MR. STAMETS: The application will be so amended. Mr. David may be excused. If there is nothing further -did I get the exhibits in? The exhibits will be admitted.

(Whereupon, Applicant's Exhibits 1

through 5 were admitted into evidence.)

MR. STAMETS: The Case will be taken under advise-

ment.

MR. EATON: Thank you.

STATE OF NEW MEXICO)) SS. COUNTY OF SANTA FE)

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, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5346. heard by me on 1974

New Mexico Oil Conservation Commission