DEARNLEY-MEIER REPORTING SERVICE, Inc.

SANTA FE, N. M. PHONE 983-3971

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

EXAMINER HEARING

ARMINGTON, M. HONE 325-118

IN THE MATTER OF:

Application of Curtis R. Inman for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Walt Canyon Unit Area comprising 11, 100.63 acres, more or less, of State, Federal and fee lands in Townships 21 and 22 South, Range 24 East, and Township 22 South, Range 25 East, Eddy County, New Mexico.

) Case No. 2953

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

Documber 4, 1963,



New Mexico

Simms

243-6601

MR. UTZ: Case 2953.

MR. DURRETT: Application of Curtis R. Inman for a unit agreement. Eddy County, New Mexico.

MR. RICHARDSON: Randolph M. Richardson, Roswell, New Mexico appearing on behalf of the Applicant. We have two exhibits, one of which is a unit agreement itself which has already been filed with the Commission, which we would like to have marked Exhibit 1 and Exhibit 2, which is the geological report. We would like to have that marked as Exhibit 2.

> (Whereupon, Applicant's Exhi bits Nos. 1 and 2 were marked for identification.)

MR. RICHARDSON: We have one witness.

(Witness sworn.)

JAMES L. LAMB, JR.

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

DIRECT EXAMINATION

BY MR. RICHARDSON:

Would you state your name, present occupation and by Q whom employed?

James L. Lamb, Junior, consulting geologist, selfemployed.

Q Could you tell the Commission your professional and ed-



ucational background, a brief statement?

Employed by El Paso Natural Gas in Midland for four I have been a consultant geologist for approximately a wear and a half. A Bachelor of Science Degree in geology from the University of Texas.

Are you familiar with the Walt Canyon Unit Area and the matters contained in the application?

Yes, sir. À

MR. RICHARDSON: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir, they're acceptable.

This is an application for the unit agreement, is that the standard federal form and federal State Exploratory Unit Agreement?

Yes, sir. A

Exhibit 1 is the proposed unit agreement, it is a form of unit agreement prescribed by the federal regulations and has it been approved by the United States Geological Survey and the Commissioner of Public Lands as to form?

Yes, sir, it has. Â

Has the area been designated by the United States Geological Survey as an area locally suitable for development under a plan of unit operation?



243-6691

A Yes, sir.

Q The unit area contains 11,100.63 acres. Could you tell the amount of acreage owned by the United States, the State of New Mexico and by patented or fee owners?

A Yes, sir. The federal lands in the unit is 10,250.95 acres; the State of New Mexico land, 689.66 acres; and the patented fee lands, 160 acres.

Q Could you tell the Commission the approximate geographical location of the unit area with reference to the nearest towns?

A The unit is located principally in Township 22 South, 24 East and is located about 13 miles due west of Carlsbad, New Mexico.

Q What does the unit agreement provide for in the way of an initial test well?

A It calls for the drilling of 10,500 foot Mississippian test which will test the entire Pennsylvanian section.

MR. RICHARDSON: In connection with that I would like to state that in our letter of designation from the United States Geological Survey they prescribed that we refer to the well to test the basal Morrow sand. The unit agreement, which is marked Exhibit 1, provides for a well to test through the Pennsylvanian or to the top of the Mississippian. The wording of the agreement



243-6601

has been changed merely to provide that the formations of Pennsylvanian age through and including the basal Morrow sand or to the top of the Mississippian formation will be tested. revised unit agreement as to that one page will be furnished.

- What percentage of commitment do you have as to working interest?
 - Approximately 90 percent.
- Do you know if all of the royalty owners and overriding Q royalty owners in the unit area been contacted?
 - Yes, sir, they have.
 - About what percentage do you expect will be committed?
 - About 98 percent. A
- Would you refer to your geological report, Exhibit 2. go through the report and briefly state to the Commission your conclusions and recommendations and how you arrive at the report?
- May I call your attention to our Plate 1, our structure A contour map. In the southern portion of 21 South, 24 East you'll see in Section 21 the Ralph Lowe No. 1 Indian Hills Unit in Section 22, the Ralph Lowe No. 1 Staple. Immediately south of the wells we have a fault indicated up to the north and down to This is a surface fault so we're definitely sure of the south. its location. You'll also see the cross section lines extending $A-A^{1}$.



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We've, on the basis of gravity which was made available to us to examine, it indicated a positive area such as we have indicated as our high area in the south part of 21 South, 24 East in the north part of 22 South, 24 East. Now, we're down to the south on our fault, we expect maybe a little closer developing against this fault coming on south to 22 South, 24 East. Section 23, you'll see the Northern Matural Gas Company No. 1 McKittrick Hills Unit. The electric log correlations indicate that this well has approximately 670 feet more Pennsylvanian section than do the two Ralph Lowe wells to the north. This additional section may be accounted for in part by regional thickening or by the fact that a thrust fault may occur in the vicinity of the Northern Natural well.

Seismic reconnaisance conducted by a major company based on poor quality indicated the possibility of a fault to the west of the Northern Natural well. We have the fault projected in a northeast direction. Actually we just had one indication of the fault crossing to the west of the well. We don't know the exact trend of the fault. but there's a distinct topographic alignment extending in this direction, and for the lack of any other evidence we assumed this may be the surface trace of the fault. However, our main reservoir will be the Cisco Reef from which Ralph Lowe 1 Staple produces. Our fault does not come up into the



Our two objectives will be the Cisco Reef and the basal Morrow sand. At this time the basal Morrow does not produce in this area, but it has had shows in several of the other wells. Our structural interpretation is based primarily on the gravity anomaly which occurs along this township line of 21, 22 South, but since we don't know exactly where the fault trends, we have asked that some additional acreage to the east be included in our unit outline.

I call your attention to our cross section for the purposes of correlation, which will be Exhibit 2.

MR. RICHARDSON: That is a portion of Exhibit 2.

It is Plate 2 of Exhibit 2. As previously stated, the cross section extends from the Ralph Lowe Indian Hills, Cisco gas discovery to the Ralph Lowe Staple, which was a dry hole, down to our Northern Natural 1 McKittrick Hills. You'll notice on the Ralph Lowe well we have the Cisco Reef and we have 640 feet of In the Staple it began to shale up. It was a dry hole, at this time it had no show.

In the Northern Natural well it was shaly in the upper portion, the lower portion tested a slight show of gas and about 7500 feet of water. What we propose, we will be structurally



high to the Northern Natural well in a reservoir probably separate from the Ralph Lowe wells by means of a fault, and we expect to pick up Cisco Reef in the prospect area. The gravity anomaly is undboutedly due to density contrast of the reef.

We have indicated the basal Morrow section in the lower part of the cross section. You'll see the additional section between the Ralph Lowe wells and the Northern Natural well. fault apparently occurs within what would be termed the Benn The correlation of this area is real rough and we can't section. tell where the fault does occur on the log.

Mr. Lamb, would you tell the Commission your conclusions with respect to the formations likely to be encountered and possible productive zones?

Well, on the basis of the producing formations in the A area we feel that shows have been encountered in the Bone Springs formation, but we don't anticipate commercial production from the Bone Springs.

Our two primary zones will be the Cisco Canyon Reef. from which the Ralph Lowe well produces, and the basal Morrow which produces in western Eddy County.

MR. RICHARDSON: We would like to offer Exhibits 1 and 2 at this time.

MR. UTZ: Without objection, Exhibits 1 and 2 will be



entered into the record of this case.

(Whereupon, Applicant's Exhibits Nos. 1 and 2 were offered and admitted in evidence.)

(By Mr. Richardson) Mr. Lamb, has the location of the Q initial test well been determined?

A No. sir. The topography is very rough in the area, we have to get a survey out to get the best location, and the roads. the well will be drilled in the middle of the winter and we have to find a means of getting into the location which will be accessible all through the winter season. We have yet to determine a way in.

In your opinion will the operation of this area under Q a unit plan of operation be in the interest of conservation and prevention of waste?

A Yes, sir.

Will the different owners of interest within the unit Q area, including the State of New Mexico, receive their fair share of production if found?

A Yes, sir.

Q Is there anything more that you would like to add to your testimony?

A No. sir.

> MR. RICHARDSON: That is all we have.



Phone 243-6691

New Mexico

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Lamb, you must have an idea where you would like to drill a well?

A Yes, sir, we're trying to locate the well along the common lines of Sections 1, 2, 11 and 12. That will be on top of the high area, and we're trying to determine or get a surveyor out to determine the exact route and a location that's readily accessible.

Q You'll probably be able to drill it somewhere in that area?

A Yes, sir.

MR. RICHARDSON: It will probably be near the center of the unit area around the south portion of 2 and 11, down through the west portion of 1 or 12?

A Right.

MR. UTZ: Are there other questions of the witness? The witness may be excused.

(Witness excused.)

MR. RICHARDSON: I would like to make a request, if I might. We are practically signed up on the unit and are trying to have it filed for final approval by about the middle of next week. If at all possible we would like to have the written order



MR. UTZ:

COUNTY OF BERNALILLO)

so that we could make our filing without delay if possible.

The case will be taken under advisement.

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 13th day of December, 1963.

Notary Fublic-Court Reporter

My commission expires: June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 29.53.

New Mexico Oil Conservation Commission

