BEFORE THE OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

Pursuant to legal notice of publication, the following matter came on for hearing before the Oil Conservation Commission of the State of New Mexico in the office of the Commissioner of Public Lands in Santa Fe at 10:00 A. M., July 7, 1948.

NOTICE OF PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico, by its Oil Conservation Commission, hereby gives notice, pursuant to law, of the following public hearing to be held July 7, 1948, beginning at 10:00 o'clock A. M. of that day in the City of Santa Fe, New Mexico.

STATE OF NEW MEXICO TO:

All named parties in the following case, and notice to the public:

CASE NO. 148

In the matter of the application of Phillips Petroleum Company for an order for final approval of the Beard Unit Agreement comprising 11,678.91 acres more or less, described as:

S\frac{1}{2} Sec. 36 T24S, R.34E; all secs. 1,2,11,12,13, 14,23 &24, and $N\frac{1}{2}$ Sec. 25, tnp. 25S, R.34E; $S\frac{1}{2}$ Sec. 5, all secs. 6,7,8,17, 18,19 & 20; $W\frac{1}{2}$ Sec. 21; NW/4 Sec. 28; $N\frac{1}{2}$ Sec. 29; $n\frac{1}{2}$ Sec. 30, T.25S, R.35E, N.M.P.M., Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, On June 22, 1948.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

(SEAL)

By /s/ R.R. Spurrier
R.R. SPURRIER, Secretary

BEFORE:

Hon. John E. Miles, Chairman Hon. R. R. Spurrier, Member and Secretary

REGISTER:

George Graham Santa Fe, New Mexico Attorney for the Commission Frank Barnes Santa Fe, New Mexico For the Commission

Raymond A. Lynch Midland, Texas For Phillips Petroleum Company

M. H. Steig Midland, Texas For Phillips Petroleum Company

COMMISSIONER SPURRIER: Read the advertisement, Mr. Graham, please.

(Mr. Graham reads the notice of publication.)

MR. LYNCH: The appearances for the applicant, Phillips

Petroleum Company, are Raymond A. Lynch, Division Attorney,

Midland, Texas, and M. H. Steig, District Geologist, Midland,

Texas, both representing Phillips Petroleum Company. For the

convenience of the Commission, I have a copy of the map that

Mr. Steig will later refer to in his testimony. I call Mr.

M. H. Steig as the first witness, and ask that he be sworn.

M. H. STEIG, having been first duly sworn, testified as

M. H. STEIG, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. LYNCH:

- Q. Mr. Steig, what is your occupation?
- A. District Geologist for Phillips Petroleum Company, located at Midland.
- Q. Are you a graduate geologist?
- A. Yes, sir.
- Q. Is Lea County, New Mexico in your district?
- A. Yes, sir, it is.
- Q. Are you generally familiar with the geological data with reference to the area?
- A. Yes.
- Q. Have you, or your associates, prepared a map of the so-called Beard unit area that is involved in this application?
- A. I have.
- Q. Do you have it there?

A. Yes.

- Q. I ask that this be identified as Applicant's Exhibit 1.

 Mr. Steig, will you explain to the Commission the information shown on this Applicant's Exhibit 1 of the Beard unit area?
- A. This map shows within a heavy red outline a block of acreage in three colors, yellow being Federal land, bright red patented land, and a sort of orange color--orange-red--State land. There are some lines on this map which represent contours of gravity data showing the differences in gravity density or attraction over this area. There is also shown one long red line extending in an east-west direction, which is the line of a refraction seismographic profile run by Phillips Petroleum Company in an attempt to obtain information on the subsurface structure. The gravity data we believe to signify a structure beneath the surface beds. The exact significance will have to depend, however, upon exploring the subsurface conditions by drilling, in order that we know exactly what its significance is.
- Q. Does this gravity survey indicate a structure as shown on that map by contour lines?
- A. We have reason to believe that it does because similar gravity features have been found and mapped over known geologic structures. Therefore, by analogy, we think it does mean this structure.
- Q. Now, does the colored area shown on this map represent the proposed unit area?
- A. That's right.
- Q. Can you give the approximate figures as to the acreage of Federal lands, and so forth, involved in the unit?
- A. According to our computations there are 8759.39 acres which are lands of the United States; 959.52 acres which are lands of the State of New Mexico; and 1960 acres which are fee or privately owned lands.
- Q. Now, does the Phillips Petroleum Company own the operating

rights, either by virtue of leases or option, on all the acreage included in the unit area?

- A. They own the operating rights on all the acreage, with the exception of the $N\frac{1}{2}$ of Section 14, Township 25 South, Range 34 East. And on this particular acreage we are in process of working out operating agreements with the owner.
- Q. Now, in the proposed Beard Unit Agreement, who is designated as the original unit operator?
- A. Phillips Petroleum Company.
- Q. And is it given authority to carry on operations for exploration and development of the area under the terms of that agreement?
- A. It is.
- Q. Does the Phillips Petroleum Company intend to drill a test well on this area in the event of approval of this unit?
- A. It is Phillips Petroleum Company's intention to drill a well as soon as the unit agreement has been fully approved to a depth of 7,000 feet, which, I think, will be a test of the upper sands of the Delaware-Mountain group.
- Q. Has the proposed unit agreement been submitted to the United States Geological Survey for their inspection and tentative approval?
- A. It has, and it has been approved.
- Q. Has it also been submitted to the land Commissioner of the State of New Mexico?
- A. It has and he has approved it.
- Q. That approval is tentative dependent upon the outcome of this hearing before the Oil Conservation Commission?
- A. That is what I understand, yes.
- Q. Mr. Steig, you have familiarized yourself generally with the proposed agreement and with the proposed plan, have you not?
- A. Yes.

- Q. Have you formed an opinion as to whether or not the development and operation under this proposed plan will result in the conservation of oil and gas and in the prevention of waste of oil and gas?
- A. In my opinion, it will.
- Q. On what do you base that opinion?
- A. The advantages of unitization are pretty well recognized in that it permits the operator a certain flexibility of operation, well spacing, density of wells, production practices, and so forth, which will enable the operator to conserve the reservoir pressure and utilize it to the greatest efficiency, and generally operate in a manner to extract the greatest ultimate yield of hydrocarbons.
- Q. Just in a general way, what does this proposed plan provide with reference to participation in the event of discovery of oil and gas?
- A. In the event of discovery of oil or gas, Phillips Petroleum Company, as operator, is to submit a plan for the development and operation of the producing area. Which plan will be approved by the Commissioner and by the authorities of the Federal Government.
- Q. And also by the Oil Conservation Commission?
- A. That is right, yes.
- Q. Now, what does it provide with reference to establishing participating areas?
- A. It provides that after production is encountered, the area believed to overlie the producing formation will be established with the approval of the previously mentioned authorities.
- Q. Now, in your opinion, will this plan of participation be fair to the royalty owners in the unit area?
- A. I am sure it will.
- Q. That is all.
- MR. LYNCH: Does the Commission have any questions?

COMMISSIONER MILES: Do you, George?

MR. GRAHAM: No, sir.

MR. LYNCH: We have nothing further to offer.

COMMISSIONER MILES: Let the record show that the case is

approved.

CERTIFICATE

I HEREBY CERTIFY that the foregoing transcript of the hearing before the Oil Conservation of New Mexico in the office of the Commissioner of Public Lands in Santa Fe at 10:00 A. M., July 7, 1948, is a true record of such proceedings to the best of my knowledge, skill, and ability.

I FURTHER CERTIFY THAT I am the official reporter for the United States District Court for the District of New Mexico.

DATED at Santa Fe, N. M. July 8, 1948.

Court Reporter