## BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

The following hearing came on pursuant to legal notice in Santa Fe on July 18, 1950, beginning at 10:00 o'clock A. M., in the House of Representatives, Capitol Building.

> NOTICE FOR PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearing to be held July 18, 1950, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representatives).

STATE OF NEW MEXICO TO:

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

## Case 227

In the matter of the application of Continental Oil Company, a corporation, for an order approving the proposed Diamond Mound Unit Agreement, embracing 27,272.85 acres of federal, state and privately-owned lands, situated in Chaves and Eddy Counties, New Mexico and more particularly described as follows:

Twp. 15S, R. 26E, - SE/4, Sec. 24 All, Sec. 25 SE/4, Sec. 26 E/2, Sec. 35 All, Sec. 36 Twp. 15S, R. 27E, - S/2 N/2 S/2, Sec. 19 S/2, Sec. 20 All, Secs. 29, 30, 31, 32 W/2 W/2, Sec. 33 TWP. 16S, R. 27E, - All, Secs. 1 to 34 inclusive NW/4 NW/4, Sec. 35

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on June 29, 1950.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION /s/ R.R. Spurrier R. R. SPURRIER, SECRETARY

SEAL

BEFORE: Hon. R. R. Spurrier, Secretary.

## REGISTER

F. J. Mathers, Ft. Worth, Texas, Continental Oil Co. F. W. Cady, do. do. W. Baxter Boyd do. do. Clarence Hinkle, Roswell, N. M. do. George Graham, Santa Fe, N. M., Oil Conservation Commission. Frank C. Barnes, do. do. Elvis A. Utz do. do.

MR. SPURRIER: Let the record show that the meeting is adjourned to my office.

(Reœss)

MR. SPURRIER: Gentlemen, we will have to sit for the purpose of taking the record only this morning since Mr. Shepard or the Governor are not here. Mr. Hinkle--oh, he isn't here.

(Recess)

MR. SPURRIER: If you are ready, we will proceed. MR. HINKLE: Have you got the style of the case there? MR. SPURRIER: Yes.

MR. HINKLE: For the purpose of the record, my name is Clarence Hinkle of Hervey, Dow and Hinkle of Roswell, attorneys for Continental Oil Co. This is before the Commission on an application of the Continental Oil Co. for the approval of the Diamond Mound unit area. The proposed unit area, which is situated in Chaves and Eddy counties in Townships 15 and 16 S., Ranges 26 and 27 E. comprises approximately 28,592 acres; of which 22,094.81 acres are federal lands, 4,073.72 acres are state lands, and 2,424.32 acres are fee or privately-owned lands.

-2-

The proposed unit area, as described in the application, has heretofore been designated by the U. S.G.S. as an area suitable and proper for unitization. There was filed with the application as Exhibit A a report prepared by W. Baxter Boyd, geologist for the Continental Oil Company, which is a copy of the same report which was filed with the U.S.G.S. and which was used as the basis for the designation of this area. We have also filed with the application copies of the proposed unit agreement, which designates the Continental Oil Company as the unit operator and gives and grants to the Continental all the powers necessary to operate the unit area. The unit agreement also provides for the commencement of a test well within six months from the effective date of the unit, and for the drilling of the well to a depth of 10,000 feet unless at a lesser depth oil and gas is discovered which can be produced in paying quantities, or the unit operator shall establish to the satisfaction of the supervisor of the U.S.G.S. as to federal lands and the Commission as to state and privately-owned lands that the further drilling deeper of the well would not be warranted.

We have here with us Mr. W. Baxter Boyd, geologist for the Continental Oil Company, whom I would like to have sworn and his testimony given in support of the application.

W. BAXTER BOYD, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. HINKLE:

- Q. Your name is W. Baxter Boyd?
- A. Yes.
- Q. Where do you live, Mr. Boyd?
- A. Fort Worth, Texas.
- Q. By whom are you employed?

-3-

- A. Continental Oil Company.
- Q. In what capacity?
- A. Area geologist for the Fort Worth Area.
- Q. Are you a graduate geologist?
- A. Yes.
- Q. Of what school?
- A. University of Oklahoma.
- Q. Of what year?
- A. 1928.
- Q. Have you practiced your profession since graduation?
- A. I have.

Q. By whom have you been employed since graduation?

A. In 1928 to 1933 I was employed by William H. Atkinson,
an independent oil operator in Oklahoma City. And--that was
'28 to '31--and from '31 to '33 I was an independent consulting
geologist working for various independents operating in the
Cklahoma City field. I went to work for the Continental Oil
Company in 1933 and I have been employed by them since that date.
Q. What areas are you in charge of for the Continental Oil Company?
A. Southeastern New Mexico, west Texas, Texas Panhandle,
west-central Texas, and north-central Texas.

Q. Are you familiar with the southeastern part of New Mexico, geologically speaking, and have you made a study of the area? A. Yes, sir.

Q. Are you familiar with the area covered by this proposed unit agreement?

A. Yes, sir.

MR. HINKLE: There is attached to the application which we have filed a reported dated March 2, 1948, as Exhibit A. I will ask you whether or not you prepared that report?

-4-

A. I did.

Q. Is that the same report that was filed with your application to the U.S.G.S. for the designation of this area? A. It is.

Q. That report is before the Commission. Of course, if you want to refer to it you can. Upon what information was this geological report based?

A. Principally sub-surface control as revealed by core drilling to a marker known as the Artesia sand.

Q. How many core tests were drilled?

A. The core tests on the terrace which we mapped in the area comprised 30 core holes, and there were other core holes around the area, but the ones which control the structure are 30 in number.

Q. Are you familiar with the form of the unit agreement which has been filed with the application?

A. I am.

Q. Does the proposed unit area in your opinion cover substantially all the geological features involved?

A. It does.

Q. State whether or not in your opinion this unit agreement will promote the economical and efficient recovery of oil and gas to the end that the maximum yield may be obtained in the event a discovery is made?

A. In my opinion it will.

Q. State whether or not in your opinion this agreement would be in the interests of conservation of oil and gas and the prevention of waste?

A. I believe it will.

MR. HINKLE: I believe that is all, unless you have some questions?

-5-

MR. SPURRIER: Do you have any questions, Mr. Graham?

BY MR. GRAHAM:

Q. This proposed unit is made up of state, federal and privately-owned lands. How many of the lessees or owners are signed up, what percentage, at this time?

A. I am not up-to-date on the details of the land situation in that unit. I expect we have some other representative here to answer that question.

MR. HINKLE: Mr. Mathers is here. We can put him on if you desire? Do you want him to be sworn or just have him make a statement?

MR. SPURRIER: He can just make a statement. It won't be necessary to swear him.

MR. MATHERS: Continental has over 24,000 acres under lease, of which 2,400 I believe are state lands and possible fifteen fee, and the balance federal. I might look in the exhibit there and I can tell you.

Q. Yes. Clarence, can you advise us as to whether there is any opposition among the land owners?

MR. HINKLE: They are in the process of getting them signed up. The restrictions of the Department of the Interior require before it is submitted for final approval we make a showing we have given every lease owner and every mineral owner in the area an opportunity to join in the unit. They have run into a few instances where they have refused to join. It is hoped before it is over with they will be able to make some kind of deal with them. I don't think it will amount to any considerable proportion of the acreage. In fact, they hope to have as much as 87-90 per cent of the acreage committed by the time it is submitted for final approval, and the chances are that most

-6-

of the acreage that is out will be on the edge of the unit. Q. The agreement itself holds out an opportunity for those outstanding interests?

MR. HINKLE: That's right.

MR. GRAHAM: Or a counterpart of it at any time they want to come in in the future?

MR. HINKLE: That's right.

MR. SPURRIER: Would you care to designate a location for the initial well?

MR. BOYD: Yes. We propose to drill, if every one is willing, the first well will be in the northeast corner of Sec. 11 on that closure on the terrace.

MR. SPURRIER: Yes.

MR. BOYD: The reason being that other structures in the area seem to have an accumulation in the permian on the east flank of such terrace, and we thought it would possibly give us the best initial well to get production in the shallow horizons. MR. HINKLE: I might ask him one other additional question. Q. Mr. Boyd, state whether or not in your opinion the drilling of this well to 10,000 feet as proposed would test all the probable producing horizons in that area?

A. It will. The regional contour on top of the Ellenburger, which is the deepest possible producing horizon in the area, predicates the top of the Ellenburger should be encountered at 9,600 feet. So we feel the 10,000 foot depth amply takes care of a good penetration of the section.

MR. SPURRIER: Does anyone have any further questions or statements to make? If not, the witness may be excused, and the meeting will stand adjourned.

-7-

STATE OF NEW MEXICO ) COUNTY OF BERNALILLO )

I HEREBY CERTIFY That the attached transcript of a hearing before the Oil Conservation Commission of the State of New Mexico on  $J_u$ ly 18, 1950, is true and correct to the best of my knowledge, skill, and ability.

DONE at Albuquerque, New Mexico, July 25, 1950.

6. C. Julian Notary Public

My Commission Expires : 8-4-52