

Case 971

PHILLIPS PETROLEUM COMPANY

LEGAL DEPARTMENT

RAYBURN L. FOSTER
VICE PRESIDENT
AND GENERAL COUNSEL

HARRY D. TURNER
GENERAL ATTORNEY

MIDLAND, TEXAS

P. O. Box 791

September 28, 1955

MIDLAND DIVISION

CARL W. JONES
CHIEF ATTORNEY
HORACE N. BURTON
JOHN T. FERGUSON
LAYTON A. WEBB
STAFF ATTORNEYS

Re: Proposed Etz Deep Unit, Lea County, New Mexico

Oil Conservation Commission
The State of New Mexico
P. O. Box 871
Santa Fe, New Mexico

Attention - Mr. W. B. Macey

Gentlemen:

Enclosed in triplicate are the proposed Unit Agreement for the Etz Deep Unit Area, Lea County, New Mexico, and application of Phillips Petroleum Company for approval of said unit agreement.

You will note that we have requested that the hearing on this matter be held before an examiner in Santa Fe, New Mexico. We should like the hearing on this matter to be held at the earliest possible date. I believe our Mr. Keller has already discussed this matter with you and has advised you of our reasons for requesting the approval of the unit agreement prior to the time all interested parties have executed the same.

Thanking you for your cooperation in this matter,
I remain

Very truly yours,



Layton A. Webb

LAW:K

BEFORE THE OIL CONSERVATION COMMISSION OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY FOR
THE APPROVAL OF THE ETZ DEEP UNIT,
EMBRACING 7,928.48 ACRES, MORE OR
LESS, LOCATED IN TOWNSHIP 20 SOUTH,
RANGE 33 EAST; TOWNSHIP 21 SOUTH,
RANGE 32 EAST; AND TOWNSHIP 21 SOUTH,
RANGE 33 EAST, N.M.P.M., LEA COUNTY,
NEW MEXICO.

CASE NO. 971

APPLICATION

NOW COMES applicant Phillips Petroleum Company, a Delaware corporation with offices in Midland, Texas, and files herewith three copies of the proposed Unit Agreement for the development and operation of the Etz Deep Unit Area, Lea County, New Mexico, and hereby makes application for the approval of said Unit Agreement as provided by law, and in support thereof shows:

1.

That the proposed Unit Area covered by said Agreement embraces 7,928.48 acres, more or less, more particularly described as follows:

NEW MEXICO PRINCIPAL MERIDIAN, NEW MEXICO

T. 20 S., R. 33 E.

Sec. 35: $S\frac{1}{2}$
Sec. 36: All

T. 21 S., R. 32 E.

Sec. 1: All
Sec. 2: All
Sec. 3: $SE\frac{1}{4}$
Sec. 10: $E\frac{1}{2}$
Sec. 11: All
Sec. 12: All
Sec. 13: All
Sec. 14: All
Sec. 15: $E\frac{1}{2}$
Sec. 23: $N\frac{1}{2}$
Sec. 24: $N\frac{1}{2}$

T. 21 S., R. 33 E.

Sec. 6: Lots 3, 4, 5, 6, 11, 12, 13,
14, 17, 18, E₂SW₄

Sec. 7: Lots 1, 2, 3, 4, E₂W₂

Sec. 18: Lots 1, 2, 3, 4, E₂W₂

Situated in Lea County, New Mexico, containing 7,928.48
acres, more or less.

2.

That the lands embraced within the proposed Unit Area are Federal and State lands; that there are 1,396.76 acres of State land and 6,531.72 acres of Federal land within the Unit Area; and that State lands comprise 17.62% of the Unit Area.

3.

That the Geological Survey, Department of Interior has approved the Unit Area as being suitable for unitization, and that it also has approved the Unit Agreement as to form.

4.

That applicant is informed and believes, and upon such information and belief states that the Unit Area embraces substantially all of the geological feature involved, and that in the event of the discovery of oil or gas thereon, the Unit Agreement will permit the producing area to be developed and operated in the interest of conservation and the prevention of waste of oil and gas.

5.

That applicant Phillips Petroleum Company is designated as Unit Operator in said Unit Agreement, and as such is given authority under the terms thereof to carry on all operations necessary for the development and operation of the Unit Area for the production of oil and/or gas, subject to all applicable laws and regulations. That said Unit Agreement provides for the commencement of a test well for oil and/or gas to be commenced within six months from the effective date of said Unit Agreement and for the drilling thereof with due diligence to a depth sufficient to test fully the Devonian formation, or to such lesser

depth as unitized substances shall be discovered in paying quantities; provided, however, that Unit Operator is not required in any event to drill said well to a depth in excess of 15,000 feet.

6.

That development and operation of the Unit Area will be conducted in accordance with a plan of development and operation having the joint approval of State and Federal authorities; that under this Agreement the State of New Mexico will receive its fair share of the oil and gas; and that this Unit Agreement in all respects tends to prevent waste and promote conservation of oil and gas.

7.

That the names and addresses of all of the working interest owners other than Phillips Petroleum Company are as follows:

Skelly Oil Company
Skelly Oil Building
Tulsa, Oklahoma

The Texas Company
P. O. Box 1720
Fort Worth, Texas

Anderson-Prichard Oil Corporation
Liberty Bank Building
Oklahoma City, Oklahoma

Richardson and Bass
Fort Worth National Bank Building
Fort Worth, Texas

The Ohio Oil Company
P. O. Box 552
Midland, Texas

Continental Oil Company
1710 Fair Building
Fort Worth, Texas

Southern California Petroleum Corporation
P. O. Box 1071
Midland, Texas

E. A. Culbertson and Wallace W. Irwin
P. O. Box 1071
Midland, Texas

H. R. Brown and W. R. Wheeler
Fort Worth National Bank Building
Fort Worth, Texas

8.

That all of the working interest owners except Continental Oil Company have already executed the Unit Agreement, and that execution of the same by Continental Oil Company is expected shortly. That efforts are continuing to obtain the commitment to the Unit Agreement of all other interests in the Unit Area.

9.

That application is being made for the approval of said Unit Agreement by the Commissioner of Public Lands of the State of New Mexico.

10.

That within ten (10) days from the effective date of the Unit Agreement an executed copy of the Unit Agreement will be filed with the Commission.

WHEREFORE, applicant Phillips Petroleum Company respectfully requests that a public hearing be held before an Examiner in Santa Fe, New Mexico, on the matter of the approval of said Unit Agreement and that upon said hearing said Unit Agreement be approved by The New Mexico Oil Conservation Commission.

CARL W. JONES
LAYTON A. WEBB
Post Office Box 791
Midland, Texas

By Layton A. Webb
Attorneys for Applicant
Phillips Petroleum Company

PHILLIPS PETROLEUM COMPANY

BOX 791
PERMIAN BUILDING

MIDLAND, TEXAS

LAND AND GEOLOGICAL DEPARTMENT
MIDLAND DIVISION

June 7, 1955

Re: Amendment to Application
for Designation of Proposed
Unit Area and Determination
of Depth of Test Well for
the Etz Unit, Lea County,
New Mexico, dated May 31, 1955.

Director
United States Geological Survey
Washington, D. C.

Secretary and Director
New Mexico Oil Conversation Commission
P. O. Box 871
Santa Fe, New Mexico

Land Commissioner
P. O. Box 791
Santa Fe, New Mexico

Gentlemen:

We wish to refer you to our Application for Designation of Proposed Unit Area and Determination of Depth of Test Well for the Etz Unit, Lea County, New Mexico, dated May 31, 1955. It was our intention to set out in this application that only those rights below a depth of 4,000 feet were to be unitized. It is, therefore, requested that our original application be amended accordingly.

The ownership down to a depth of 4,000 feet under a portion of the oil and gas leases being committed to this unit is not owned by the parties who have agreed to participate in said unit. Present well information in the immediate vicinity of the Etz Unit indicates that there is no readily identifiable geologic marker between the Tansill dolomite, which should be encountered at an approximate depth of 3150 feet, and the Delaware lime, which should be encountered at an approximate depth of 5,000 feet. Based on present well information we do not expect to encounter commercial production of oil and/or gas above a depth of 4,000 feet within the limits of the Etz Unit.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

By 

Edwin Van den Bark
Division Manager
Midland Division

CFK:br

PHILLIPS PETROLEUM COMPANY

BARTLESVILLE, OKLAHOMA

LAND AND GEOLOGICAL DEPARTMENT

C. O. STARK, VICE PRESIDENT
D. E. LOUNSBERY, ASST. TO VICE PRESIDENT
D. C. HEMSELL, DEPARTMENT MANAGER
W. B. WEEKS, ASST. DEPARTMENT MANAGER
A. J. HINTZE, EXPLORATION DIRECTOR

May 31, 1955

Re: Application for Designation of
Proposed Unit Area and Determination
of Depth of Test Well for the Etz
Unit, Lea County, New Mexico.

Director
United States Geological Survey
Washington, D. C.

Secretary and Director
New Mexico Oil Conversation Commission
P. O. Box 871
Santa Fe, New Mexico

Land Commissioner
P. O. Box 791
Santa Fe, New Mexico

Gentlemen:

Attached hereto is map marked Exhibit "A" on which the proposed Etz Unit area is outlined. The lands included are both Federal and State with the Federal lands designated by the color blue and the State lands by the color yellow. We respectfully request that the 7,688.48 acres within this outline be designated as a logical unit area pursuant to regulations of January 17, 1947. Phillips Petroleum Company, as operator, anticipates submitting at a later date a standard form of unit agreement with Exhibit "B" attached showing the percentage and kind of ownership of oil and gas interests in all lands in the unit area.

The lands located within the proposed unit area are described as follows:

Township 20 South - Range 33 East

Section 35: $S\frac{1}{2}$
Section 36: $W\frac{3}{4}$

Township 21 South - Range 32 East

Section 1: All	Section 13: All
Section 2: All	Section 14: All
Section 3: $E\frac{1}{2}$ $SE\frac{1}{4}$	Section 15: $E\frac{1}{2}$
Section 10: $E\frac{1}{2}$	Section 23: $N\frac{1}{2}$
Section 11: All	Section 24: $N\frac{1}{2}$
Section 12: All	

Township 21 South - Range 33 East

Section 6: Lots 3 thru 6, 11 thru 14, 17, 18, $E\frac{1}{2}$ $SW\frac{1}{4}$
Section 7: Lots 1 thru 4, $E\frac{1}{2}$ $W\frac{1}{2}$
Section 18: Lots 1 thru 4, $E\frac{1}{2}$ $W\frac{1}{2}$

It is requested that a well drilled to a depth of 15,000 feet or such lesser depth as will test fully the Devonian formation be approved as the required depth of the unit test well. Such test well is to be located in the approximate center of Lot 10, Section 1, Township 21 South, Range 32 East, NMPM, as shown on the attached plats. In support of this application, Phillips Petroleum Company herewith submits the following pertinent geological information:

Exploration in the Etz area was carried out by reflection seismograph and subsurface methods both of which were used interrelated with each other. The seismic programs were conducted independently of each other at various times by Anderson-Prichard, Skelly and Continental Oil Companies. A seismograph interpretation which is a result of work done by these three companies is appended to this application. This seismic picture confirms the presence of a large, north-south trending asymmetrical anticline which appears to have two local "knobs", separated by saddle.

A geological subsurface map was constructed by utilizing sub-sea datum points on the top of the Tansill Dolomite found in the various wells drilled in the Etz Area.

The shallow Tansill Dolomite has been used as a mapping horizon simply because it is the deepest marker thus far encountered by wells in this area which has not been affected to any great extent by reef replacement nor by the interfingering Delaware Basin sand lenses so prevalent in the lower members of the Whitehorse Group. The subsurface interpretation reveals a structure that resembles a dome in appearance with the exception of a gentle nosing effect extending northward into the extreme southeast portion of Township 20 South, Range 33 East. Closure in excess of 200 feet is exhibited. Thus it can be noted that the subsurface picture obtained from substantial well control bears a striking resemblance to and reflects the deeper seated seismic anomaly.

Ten shallow wells, all being dry holes, have previously been drilled within the proposed Unit outline. These wells, along with their locations and total depths, are listed below:

1. Resler et al #1 Magnolia-State (Section 36, T-20S, R-33E) T. D. 3509'
2. Southern Calif. #1 Sheppard-Federal (Section 1, T-21S, R-32E) T. D. 3508'
3. Culbertson & Irwin #1 Sheppard (Section 1, T-21S, R-32E) T. D. 3496'
4. Culbertson & Irwin #1-A Sheppard (Section 1, T-21S, R-32E) T. D. 3445'
5. Culbertson & Irwin #1 Boesche (Section 2, T-21S, R-32E) T. D. 3500'
6. Culbertson & Irwin #1 Richards (Section 10, T-21S, R-32E) T. D. 3872'
7. Jeffers #1 Etz (Section 12, T-21S, R-32E) T. D. 3590'
8. Getty #1 Etz (Section 12, T-21S, R-32E) T. D. 3517'
9. Culbertson, et al #1 Brown (Section 23, T-21S, R-32E) T. D. 3602'
10. Culbertson, et al #1 Eaves (Section 18, T-21S, R-33E) T. D. 3813'

None of the above listed wells penetrated lower than the upper Seven Rivers formation with the majority of them being stopped in the Yates and none offered commercial quantities of oil or gas. However, these wells cannot be considered adequate tests of the Etz structure except to the shallow horizons they encountered. The nearest well that actually drilled to the Devonian is the Stanolind #1 Buffalo Unit located approximately thirteen miles north

Director, United States Geological Survey
May 31, 1955
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of the subject area. This well was completed as a Wolfcamp discovery after finding the Devonian barren at a total depth of 14,916 feet.

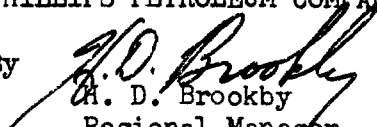
The proposed Unit outline was so placed to substantially enclose the entire structure depicted on the shot picture as well as including enough flank acreage for protection of acreage on the primary part of the feature.

It is respectfully requested that this information be held confidential.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

By


H. D. Brookby
Regional Manager
Southwest Region

HDB/ns
Attach.