

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

* * * * *

TRANSCRIPT OF PROCEEDINGS

CASE NO. 675

Regular Hearing

March 18, 1954

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
AT
Santa Fe, New Mexico
March 18, 1954

IN THE MATTER OF:

The application of Shell Oil Company for approval of an agreement for the development and operation of the Bluit Unit Area embracing 12,478.41 acres of land, more or less in Roosevelt County, New Mexico, as described:

Case No.
675

NEW MEXICO PRINCIPAL MERIDIAN

Twp. 7 South, Rge. 37 East
Sections 26, 27, 34 and 35, all

Twp. 8 South, Rge. 37 East
Section 1: W/2
Sections 2 and 3, all;
Sections 7 through 15, all;
Section 16; N/2;
Section 17; N/2;
Section 22; NE/4;
Section 23; E/2 NW/4;
Section 24; All

Twp. 8 South, Rge. 38 East
Section 18: W/2;
Section 19: W/2

TRANSCRIPT OF PROCEEDINGS

B. J. FERRIS

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. HOWARD:

Q Mr. Ferris, would you take the stand? If the Commission please, this is the application of Shell Oil Company for the approval of what is referred to as the Bluit Unit situated in Roosevelt

County, New Mexico.

Q State your name, please, for the record.

A Bernard J. Ferris.

Q By whom are you employed?

A The Shell Oil Company.

Q In what capacity?

A District Geologist, Roswell District.

Q You are a geologist by profession?

A Yes, sir.

Q Have you ever testified before the Commission before?

A No, sir.

Q Would you state your education and professional standing?

A I have a Bachelor's and Master's degree in Geological Engineering from the Colorado School of Mines; I have worked in the capacity of a geologist for five and a half years, with Shell Oil Company.

MR. HOWARD: We ask that he be qualified.

Q Are you familiar with what is referred to as the Bluit Unit in Roosevelt County, New Mexico?

A Yes, sir.

Q Would you mark that, please, as Exhibit A?

(Marked Exhibit A for identification)

Q I hand you what has been marked as Exhibit A and ask you to state what that is, please.

A Exhibit A is the outline of the proposed unit designated as our Bluit Unit in Southeast Roosevelt County, New Mexico. Within the outline, in three different colors, we have shown private, state and federal acreage to be included in the unit.

MR. HOWARD: I ask this be admitted, please.

MR. SPURRIER: Without objection, it will be admitted.

Q State to the Commission, please, the general location of the unit, both geographically and geologically.

A Geographically, the proposed unit area is in the extreme southeast portion of Roosevelt County, New Mexico, about 12 miles northeast of Cross Roads Pool; geologically, the center of the unit lies along the boundary separating the North Basin and the Pedernal Uplift.

Q Just for the matter of the record, will you read into the record the descriptions of the lands involved?

A The following described land is hereby designated and recognized as constituting the unit area: New Mexico Principal Meridian, New Mexico; township 7, South, Range 37 East; all of Sections 26, 27, 34 and 35. Township 8, South, Range 37 East; West half of Section 1, all of Sections two and three; all of Sections Seven through 15 inclusive; the North half of Section 16; the North half of Section 17; the Northeast quarter of Section 22; the East half and the Northwest quarter of Section 23; and all of Section 24. In Township 8 South, Range 38 East: the West half of Section 18, and the West half of Section 19.

Q To your knowledge has Shell Oil Company conducted exploratory work in this area?

A Yes, sir, they have.

Q State just generally the nature of the work that has been done.

A The exploratory work falls into two categories; one is seismic data. We have conducted a seismic survey in the area and

have prepared seismic interpretations from the data obtained. The survey consisted of continuous seismic profiles, shot approximately on a mile to a mile and a half spacing. The other type of exploratory data consists of sub-surface information from wells drilled in and around the Bluit area.

Q Is it your opinion that an anomaly or structure exists in this area?

A It is.

Q Just state generally what is shown.

A The seismic data which we obtained are based upon a good correlative reflection approximately from the Abo level. These data; obtained from lines spaced approximately at one mile intervals, indicate a large domal uplift having about 300 feet of closure. Steep dips and sharp synclines on the north, west, and south flanks of the feature suggest faulting, although the apex is not faulted. Superimposed upon this domal structure is a southeast-plunging structural nose which trends across the east part of the proposed Bluit Unit area.

Q In your opinion, to what depths should a well be drilled, in order to give this area a test?

A To approximately 10,700 feet.

Q State just generally the types of formations that you might expect to encounter.

A Starting from the surface down, we would expect about 8.750 feet of Permian strata. That would consist of red shale, dolomite, sandstone, limestone and chert. About 1000 feet of Pennsylvanian limestone, sandstone and shale; about 250 feet of Mississippian strata which would consist of limestone and chert,

primarily, with some shale. Siluro-Devonian sediments would consist primarily of 200 feet of dolomite. About five hundred feet of Ordovician beds consisting of dolomite and chert would be expected.

Q Now, is it your opinion, from the studies that you have made, that the proposed unit boundaries include all the lands that might be reasonably expected to produce oil and gas from this common source of supply?

A Yes, sir, it is.

Q And that such boundaries do not include lands which might reasonably be expected not to produce from this common source of supply?

A That is correct.

Q Is it your opinion that if commercial production is obtained that operation under this unit plan would be the best reservoir practice for producing the most oil from the structure?

A Yes, sir, it is.

Q That operation under the plan will prevent waste?

A Yes, sir.

Q And that it will protect correlative rights?

A Yes, sir.

Q Are you familiar with how much of the acreage has been committed, at this time, by the unit owners?

A Not by specific number, but in general.

Q The acreage that has been committed to the unit at the present time by the working unit owners--are you of the opinion it gives effective control for the proper operation of this unit?

A Yes, sir, I am.

Q Do you have any further comment to make?

A No, sir.

MR. SPURRIER: Are there any questions of the witness?
Do you want this witness, or the next one to explain this?

Q Oh, pardon me, there is one area in which a dry hole has
been drilled?

A Yes, sir.

Q Would you describe it?

A The area to which Mr. Howard refers, lies northwest of
our proposed unit area now. In 1948, Shell drilled our Federal-Saunders
No. 1 at this location in Section 5, Township 8 South, Range 37
East. That test was drilled to the pre-Cambrian and was plugged
and abandoned after tests of the section revealed no commercial
accumulation of oil or gas. Inasmuch as that test failed, we have
excluded that portion of the structure from our proposed unit area.

Q And that dry hole is the reason why you have eliminated
that portion of the anomaly from this unit?

A That is correct.

MR. SPURRIER: Are there any questions of the witness?
If not, he may be excused.

(Witness excused)

O. V. L A W R E N C E

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. HOWARD:

Q State your name, please.

A O. V. Lawrence.

Q By whom are you employed, and in what capacity?

A Shell Oil Company, as District Land Agent for the Roswell

District.

Q And in your capacity, are you familiar with the unit agreement known as the Bluit Unit?

A Yes, sir.

Q Would you mark that Exhibit B, please?

(Marked Exhibit B for
identification)

Q I hand you what has been marked as Exhibit B and ask you to state what that is, please.

A It is the unit agreement for the drilling and operation of the Bluit Unit area. The unit covers a total of 12,478.41 acres. Of this total there are 10,237.77 acres of Federal land which represents 82.04 percent. 640 acres of the total is State land, being 5.13 percent. 1600.64 acres is fee, or patented land, this being approximately 12.83 percent of the total unit area.

Q I ask this be admitted, please.

MR. SPURRIER: Without objection, it will be admitted.

Q Is that agreement in the form of a Federal Unit agreement, that is prescribed by the Federal Government and has heretofore been approved by the Oil Conservation Commission, and the State Land Commissioner?

A It is the standard form and it is the type of unit agreement that has heretofore been approved, where Federal, State and fee or patented lands are involved.

Q Unless the Commission desires, I will not have him go into detail as to what the provisions are. Will you please state to the Commission the status of this unit, as regards preliminary approval by the United States Geological Survey?

A Yes, sir, we have received preliminary approval by the

Director of the Geological Survey as to the unit area, and as to form.

Q And the form, a copy of it has been submitted to the Land Commissioner's office?

A That is correct, sir, and we have verbal approval as to form by the attorneys for the Land Office.

Q Under this agreement, Shell Oil Company is named as operator?

A Shell Oil Company is the unit operator.

Q Please describe the drilling requirements contained in the unit.

A It provides that within six months after the effective date of the unit agreement, Shell shall drill a 10,700 foot well to test the Ellenburger formation, unless at a lesser depth unitized substances are found or discovered in paying quantities, or the unit operator establishes to the satisfaction of the Supervisor that further drilling would be unwarranted or impractical.

Q And the agreement has the usual form regarding submitting a plan of development in case production is found?

A Yes, sir, it has.

Q Would you state to the Commission, the present status as to the signatures that have been obtained?

A Of the working interest owners, five have executed the unit agreement. The Gulf Oil Corporation have advised that they are presently executing this agreement. This means that of the total 12,478.41 acres, we have 11,761 acres committed. This makes approximately 94.25 percent of the working interest committed.

Q And you are still attempting to get the remainder of those

who may be out?

A Yes, sir, the Sinclair Oil and Gas Company and the Humble Oil and Refining Company, owners of 3.84 percent are still considering the matter. The Atlantic Refining Company, owner of 1.91 percent, advised that they have decided not to join the unit.

Q It is your opinion that under the terms of the unit agreement, the rights of royalty owners will be fully protected?

A Yes, sir, that is my opinion.

Q Does the Commission have a question?

MR. SPURRIER: Anyone have a question of the witness?

If not, he may be excused.

(Witness excused)

MR. SPURRIER: Do you have anything further?

MR. HOWARD: I have nothing further.

MR. SPURRIER: If not, we will take the case under advisement and recess until 1:30.

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