

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

April 15, 1952

In the Matter of:

Stanolind's application for approval
of Guadalupe Foothills Unit Agree-
ment embracing 25,924.50 acres of
land in Townships 21, 22 and 23 South,
Ranges 24 and 25 East, Eddy County,
New Mexico.

Case No. 358

(Notice of Publication read by Mr. Graham.)

MR. SETH: Seth and Montgomery appearing on the behalf
of Stanolind Oil and Gas Company. This is the application in the
usual form for approval of a unit area known as the Guadalupe
Unit area.

T O M L. I N G R A M,
having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SETH:

Q Would you state your name and the position you hold,
Mr. Ingram.

A Tom L. Ingram, District Geologist for Stanolind Oil and
Gas in southern New Mexico district.

Q You have never testified before this Commission before?

A No, I have not.

Q State your qualifications.

A Have Bachelor of Science in Geological Engineering from the University of Oklahoma, one year of geo-physical work with Petti Geo-physical Engineering Company, and just slightly less than five years of geological work with Stanolind.

Q The nature of your work with Stanolind?

A Both of a sub-surface and surface nature and served as area geologist and now district geologist.

MR. SETH: Are the witness' qualifications acceptable?

MR. SPURRIER: They are.

Q In your capacity have you ever become familiar with the geology in the area which is now known as the Guadalupe Foothills Unit area in Eddy County, New Mexico?

A I have.

Q Would you state to the Commission the general geological basis for the unit and the application for the approval thereof.

A Well, geographically speaking, the unit is located some 15 miles west of Carlsbad in central Eddy County, New Mexico, Township 21, 22, 23, South, Ranges 24 and 25 East. From a geological standpoint it is located on the Toya-Mesilla Dissected Plateau which forms the eastern prong of the Guadalupe Mountains. It is separated from Seven Rivers Enbankment by High Cliffs on the west and it is bounded on the south by the Capitan Mountain. The surface is covered by Tansill, Yates and Seven

Rivers formation of the Guadalupe series and there is a small amount of Alluvian in the valleys. We have constructed, our geologists have constructed a surface map of the area, Stanolind geologists have.

Q What formations do you expect to encounter within the unit area?

A Well, the formations that we expect to encounter in the area, beginning at the permian age, Yates, Seven Rivers and Carlsbad from a depth of, say, zero to 1600 feet. The Delaware Mountain from 1600 to 2550 feet. The Bonn Springs from 2550 to 5500. The Hueco from 5500 to 8500 feet. Then enter the Magdalena formation and Pennsylvanian age from 8500 to 9700 feet. Then undifferentiated lime stones of Mississippian age, with possibly some Devonian, that being a depth of 9700 to 10,700 feet. Then the Fusselman Formation of Silurian age at 10,300 to 10,850 feet.

Q The expected test is at the Silurian formation, is that correct?

A Yes.

Q Do you have a map showing the unit boundaries in it?

A Yes, I have one here.

MR. SETH: We would like to offer this map as Stanolind's Exhibit No. 1.

MR. SPURRIER: Without objection it will be received.

Q Would you describe how the unit boundaries were determined as shown on this map?

A The map was prepared by geologists based on surface elevations of various beds. United States Geologic Survey bench marks were used and all traverses closed and there were several different datums within the Yates formation; however, they were all reduced to a single datum at the top of the original sandstone members some 700 feet below the top of the Yates.

Q Do you believe that there is a reasonable expectation of encountering oil and gas within the unit area?

A Yes, we do, based on other deep wells in the area that have shown porosity in the Fusselman formation as well as in the shallower formations.

Q In your opinion will the development of this area as a unit lead to the greatest ultimate recovery of oil?

A Yes, I think so.

Q Do you believe that operation of this area under a unit plan, under a unit plan as proposed here, will give to the state its fair share of the oil and gas?

A Yes, it will.

Q Do you also believe that the operation of this area under the unit plan will lead to the most orderly and most rapid development of this particular area?

A Yes, I think definitely orderly development based on the structural position.

MR. SETH: That is all the questions I have. If the Commission, please.

MR. SPURRIER: Anyone have a question? If not, the witness may be excused.

(Witness excused.)

E L M E R J A C K S O N,
having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SETH:

Q State your name and position, Mr. Jackson.

A Elmer Jackson, employed in the unitization section of Stanolind Oil and Gas Company in Tulsa.

Q Are you familiar with the unit agreement known as the Guadalupe Foothills Unit agreement?

A I am, sir.

Q Would you state to the Commission in general terms the provisions of the unit, if it varies in any material respect from unit agreements previously considered by the Commission?

A It does not vary in any respect from agreement previously approved by the Commission. It is the usual type of exploratory unit agreement. It provides for the commencement of the initial test well within six months from the final approval of the unit agreement. It provides that in the event that well is completed as a dry hole an additional well will be commenced in six months unless that obligation is either extended or the unit is terminated according to its own provisions. If the well is completed

as a producer the agreement requires a filing of a plan of development with the Commissioner and the Commission to provide for further development of the structure.

Q Do you have a map showing the unit boundaries and the division of ownership?

A I have.

MR. SETH: We would like to offer this as Stanolind's Exhibit No. 2.

MR. SPURRIER: Without objection it will be received.

Q Would you describe to the Commission, briefly, what this map shows by way of the division of ownership within the area?

A The map depicts by color the type of land that is involved in the unit, state, federal and patented land. In addition it describes each lease by a tract number and indicates the owner of the working interest under that lease.

Q Would you state in percentages the ownership of the lands within the area?

A Federal land constitutes approximately 83 per cent of the unit area, state land slightly in excess of 14½ per cent, and patented land approximately 2½ per cent.

Q Do you have executed copies of the unit agreement?

A I have two copies.

MR. SETH: If the Commission please, we would like to offer these two copies as Stanolind's exhibits with the right to

withdraw them and substitute copies not executed.

MR. SPURRIER: Very well.

Q Would you state, please, Mr. Jackson, the proportion of acreage within the various categories committed to the unit at this time?

A The total presently committed to the unit is 93 per cent and we have reasonable expectation that another three-quarters of one per cent will be committed, and the remaining six and one-quarter per cent have refused to join the unit at this time. As to the state acreage, there is presently committed 2880 acres, or $76\frac{1}{2}$ per cent of the total state acreage. We have reasonable expectation an additional 40 acres, or one per cent of the state acreage, will eventually be committed; and the owners of 840 acres of state land, or approximately $22\frac{1}{2}$ per cent, have refused to join the unit.

Q Does the agreement provide that later that interested owners may join at later dates?

A It does so provide.

Q And opportunity given to them to commit their acreage? If they desire they will be given that opportunity?

A Yes.

Q In your opinion, Mr. Jackson, do the terms of the agreement provide that the state will receive its fair share of the oil and gas that is recoverable?

A In my opinion it does, yes, sir.

Q Do you believe that the operation under this unit agreement in this area will tend to conserve critical materials and equipment?

A It definitely will.

Q Will it, in your opinion, promote the orderly and rapid development of this particular area?

A Yes, sir.

Q Will it likewise lead to the greatest ultimate recovery of oil and gas?

A Yes, sir.

Q Do you believe and is it in your opinion in the best interest of the State of New Mexico?

A It is.

MR. SETH: I believe that is all of this witness.

MR. SPURRIER: Any questions of this witness? If not, the witness may be excused.

MR. SETH: That is all our testimony on 358, if the Commission please.

MR. SPURRIER: The case will be taken under advisement and the next case is Case 359.

(Witness excused.)

STATE OF NEW MEXICO)
 :
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 358 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on April 15, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this _____ day of April, 1952.

REPORTER

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