

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

CASE NO. 599

January 20, 1954

Regular Hearing

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In the Matter of:

Section (a) of the Southeastern New Mexico nomenclature case was continued from October 15 to permit study of bottom-hole pressure surveys. It involves creation of the East-Hobbs-Seven Rivers Pool for Seven Rivers production, to include all of Section 25, Township 18 South, Range 38 East.

Case No. 599

(Notice of Publication read by Mr. Graham).

S. J. S T A N L E Y

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. GRAHAM:

Q State your name and position.

A My name is S. J. Stanley, Engineer for the Oil Conservation Commission of New Mexico.

Q You have certain maps and plats and material there with which to testify in your own way in this case?

A I do. By request of this Commission I have compiled certain engineering data pertaining to the East Hobbs San Andres Pool. The purpose for this request was to better acquaint the Commission with various formations penetrated in the East Hobbs area and to also define a well which was placed on the undesignated status, namely the Hardin-Houston-Taylor No. 1, located in Section 25 Range 38 East, Township 18 South. It was requested that this well be placed on the

undesigned list until such time as the Commission could make an investigation and place its category as an operator had requested that it produced from the Seven Rivers pay. Therefore, I have here what is marked first of all Exhibit No. 1, and it serves as a key map for the East Hobbs San Andres Pool. The East Hobbs field has twenty-three San Andres oil wells and one undesigned Seven Rivers well. The red line is the direction of a cross section which will be shown in Exhibit No. 3. Also the key map serves as a gas-oil ratio map which was taken by request of the Director of the Commission, who in November, 1953, requested that the operators conduct a gas-oil ratio survey in the area, a bottom hole pressure survey, as exhibited in Exhibit No. 2, and other information which was necessary for the Commission to definitely establish that a Seven Rivers pay existed in that particular field. Now, referring to Exhibit No. 1, which is the gas-oil ratio map we see that the San Andres Field has an average ratio of approximately four hundred to one, it is characterized by very under saturated oil, and in comparison to the undesigned well, namely the Hardin-Houston-Taylor No. 1, we see that it has a gas-oil ratio of eighteen hundred to sixteen hundred to one. The two different producing horizons have the similar gas-oil ratios and their flowing characteristics are different. We have in Exhibit No. 2 conducted a bottom hole pressure survey, which was projected on a datum of minus two hundred and when you compare the bottom hole pressures of the Hardin-Houston-Taylor No. 1 we see that it is one thousand four hundred sixteen pounds, as compared to the average bottom hole pressure of the San Andres Field projected to minus two hundred at approximately eleven hundred pounds. Actually in the East Hobbs San Andres Field we

do have a lot in the vicinity of the Vierson Oil Company Laney lease and a secondary high on the east flanks of the field. But still there is a differential pressure there between the two distinct formations of approximately three hundred some odd pounds.

In Exhibit No. 3 I have compiled a cross section as shown on the key map in Exhibit No. 1, and have found through radio active log studies that we have had some very clear defined points ^{the} on tops of certain producing formations, namely the Yates, secondly the top of the Seven Rivers is not very clear, which is the general characteristic throughout Lea County. However, the Seven Rivers pay and this Hardin-Houston Well occurred from approximately 3850 to total depth of 3875. Whereas, as is shown here the much deeper penetration in the San Andres Field, which occurs at around 4500 feet. I thought we had established good correlation across the field and it is very interesting to note that one operator has drill stem tested a well, namely the Vierson-Laney No. 2, also in the Seven Rivers pay, but continued and elected to produce this well by drilling deeper and producing from the San Andres Field. At that particular time he had received commercial production and I believe it was in the neighborhood of a flow of fifty barrels an hour from the Seven Rivers pay. We also had another drill stem test by Morris Antweil on their Davis No. 1, located in the Section 29, Township 18 South, Range 39 East, and the operator had chosen to test the top of the Queen. ^{The} He drill stem tested from 3917 to 3971, the ^{well} ~~tube~~ was open one and one half hours and recovered three hundred MCF of gas per day. He did not test the Seven Rivers Pay Section in this particular well. Therefore, based on the evidence available to me the gas-oil ratio map, the bottom hole

pressure map and a cross section map I recommend the creation of the East Hobbs-Seven Rivers Pay to incorporate the southwest quarter of Section 25, Township 18 South, Range 38 East.

MR. SPURRIER: Are there any questions of the witness? If not the witness may be excused. Is there any further comment in this case? Would you like to introduce the Exhibits?

MR. STANLEY: Yes, sir, I would like to introduce the Exhibits in support of my testimony.

MR. SPURRIER: Without objection the Exhibits will be admitted. We will take the case under advisement and move on to Case 651.

STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 599 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on January 20, 1954, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 25th day of January, 1954.

Ada Dearnley
REPORTER