BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

Santa Fe, New Mexico

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TRANSCRIPT OF PROCEEDINGS

CASE NO. 698 and 699

Regular Hearing

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
May 19, 1954

IN THE MATTER OF:

Application of Stanolind Oil and Gas Company for approval of a 160-acre unorthodox gas proration unit in the Blinebry Gas Pool consisting of E/2 SE/4 SW/4 SE/4, and SE/4 SW/4 of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico. — Case No. 698

IN THE MATTER OF:

Application of Stanolind Oil and Gas Company for approval of a 160-acre unorthodox gas proration unit in the Tubb Gas Pool consisting of E/2 SE/4, SW/4 SE/4, and SE/4 SW/4 of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico. — Case No. 699

TRANSCRIPT OF PROCEEDINGS

MR. TOWNSEND: Jim Townsend, representing Stanolind Oil and Gas company. We would like to request that Case 698 and Case 699 be heard together. We are not requesting that the Cases be consolidated but much of the proof will cover both cases and there is no need of duplicating the effort. We request that separate orders be entered but consolidated for the purpose of taking testimony. We call Mr. Hiltz.

R O B E R T G. H I L T Z

the witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By: MR. TOWNSEND:

Q Please state your name to the Commission?

A Robert G. Hiltz.

Q By whom are you employed and where?

A I am employed by the Stanolind Oil and Gas Company in Fort Worth, Texas.

Q In what capacity?

A I am a petroleum engineer.

Q Have you previously testified before this Commission?

A Yes, I have.

Q Are the witness's qualifications acceptable?

MR. SPURRIER: They are.

Q Will you please state for the benefit of the Commission, briefly the nature of Stanolind's application in Case No. 698?

A Case 698 is the application of Stanolind Oil and Gas Company for an unorthodox gas proration unit in the Blinebry field to be assigned to Stanolind Southland Royalty Company A No. 5 well which has recently been dually completed in the Blinebry formation. This unorthodox gas unit is requested as an exception to Rule 6-A of Commission's Order No. R-372-A.

Q Where is the Stanolind Southland Royalty Company A No. 5 well located?

A This well is located 660 feet from the east line and 1980 feet from the south line of Section 4, Township 21 South, Range 37 East, in Lea County, New Mexico.

Q Will you describe the area to be covered by this proposed gas proration unit?

A It is proposed that this unorthodox gas proration unit comprises the east half and the south west quarter of the most southeasterly 160 acres and the southeast quarter of the most southwesterly 160 acres in Section 4, Township 21 South, Range 37 East.

Q What is the current status of this so-called No. 5 well, right now?

A It was initially completed as an oil well in the Drinkard formation and is currently producing oil from the Drinkard. It has recently been dually completed under Commission authority as a gas well in the Blinebry Gas Pool. The well is currently shutting in, awaiting pipeline connections.

(Marked Stanolind's Exhibit No. 1, for identification.)

Q I hand you what has been marked as Stanolind's Exhibit No. 1 in Case 698 and ask you to identify and explain it?

A This is the map of the area in the vicinity of the proposed gas proration unit which has been contoured on top of the Blinebry formation with a contour interval of 25 feet. The proposed gas proration unit is outlined in yellow. The Southland Royalty Company A No. 5 well is also colored in yellow. Other Blinebry gas well completions in the area are also colored in yellow. We have indicated on this map in addition to that information the traces of two cross sections A-A' and B-B' which will be discussed later.

MR. TOWNSEND: We would like to offer in evidence Stanolind's Exhibit No. 1.

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

Q Mr. Hiltz, will you explain why this is an unorthodox gas proration unit?

A According to the provisions of Commission's Order R-372-A, a standard gas proration unit will comprise a normal governmental subdivision or a normal quarter section, since a portion of this proration unit does not lie within the normal quarter section, it

must be treated as an unorthodox gas unit.

Q Has consideration been given to stake a normal or standard proration unit?

A Yes, it has, but we considered it neither practical nor feasible to attempt to communitize acreage where a dual completion is involved.

Q Does Stanolind own all of the acreage under the proposed unorthodox proration unit?

A Yes, Stanolind owns all of the working interest in the proposed unit.

Q Before going further, will you explain briefly the nature of Stanolind's application in Case No. 699?

A This is our application for the formation of an unorthodox gas proration unit to be assigned to Stanolind's Southland Royalty Company A No. 4 well which has been recently completed for a gas producer from the Tubb formation. It is requested as an exception to Commission's Order No. R-373-A.

Q Where is this so-called No. 4 well located?

A This well is located 660 feet from the south and east line of Section 4, Township 21 South, Range 37 East in Lea County, New Mexico.

Q Is the area to be covered by this proposed unit, the same area as is to be covered by the unit under Case No. 698?

A Yes, it is and for the record, in Case 699, I would like to repeat that acreage. The proposed unit would comprise the east half and the south west quarter of the most southeasterly 160 acres and the south east quarter of the most southwesterly 160 acres in Section 4, Township 20 South, Range 37 East.

Q What is the current status of this No. 4 well?

A No. 4 is currently a dually completed well with oil being produced from the Drinkard formation and a recent completion for production of gas from the Tubb formation. The Tubb formation is also currently shut-in awaiting pipeline connection.

MR. TOWNSEND: We ask this be marked Exhibit No. 2, this is in Case 699.

(Marked Stanolind's Exhibit No. 2, for identification.)

Q I will hand you what has been marked as Stanolind's Exhibit No. 2 and ask you to identify and explain it, if you will?

A This is quite similar to Stanolind's Exhibit No. 1. It is a map of the area in the vicinity of the proposed gas proration unit. This map however has been contoured on top of the Tubb formation to indicate the nature of the structure of the Tubb in this area. The proposed unit has been outlined in yellow and the No. 4 well to which the acreage would be assigned has been colored in red. Other Tubb gas completions in the area have also been colored in red. Also indicated on this map are the traces of the same two cross sections A-A' and B-B', to which reference has been made previously.

MR. TOWNSEND: We would like to offer in evidence Stanolind's Exhibit No. 2.

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

Q Why is there an unorthodox gas proration unit?

A The reason here is similar to Case 698. The Commission's Order R-373-A requires that a standard proration unit comprises a normal quarter section, again a portion of this gas proration unit does not lie within a normal quarter section, hence it must

be treated as an unorthodox unit.

Q Has consideration been given to establishing a standard unit in this instance?

A Yes, and for the same reason we consider it impractical and not feasible.

Q For the record, Stanolind owns all of the acreage which is the same acreage under this proposed unorthodox unit?

A That is correct.

Q Calling your attention to Exhibits 1 and 2, they reflect, do they not, that a dry hole was drilled in the most westerly 40 acres of the proposed unit or these proposed units? Could you explain that to the Commission?

A Yes, that well was originally drilled to a total depth of 6730 feet and was abandoned as a dry hole after testing the Drinkard area. This well was drilled and completed in April of 1948. At that time, there was no indication that either the Tubb or Blinebry formations would be productive in this area. During the drilling of this well, no attempt whatsoever was made to test the Tubb or Blinebry formations either during the drilling of the well or prior, just prior to plugging the well after determing that the Drinkard was non-productive.

Q Well, in your opinion, in light of this, do you think that this acreage is productive of gas from the Tubb and the Blinebry formations?

A Yes, there would only be two factors, I believe, which would preclude it being productive. First, since this well is located somewhat lower structure, there might be a porosity or permeability pinch out or a shaling out of the producing formations

or that the producing interval dip below a batter oil contact. Based on our analysis of the data available, neither of these factors will preclude this area in the proration unit being productive of gas from either the Tubb or Blinebry formations.

Q Have you prepared any Exhibits to support this opinion that this area is productive?

A Yes, as indicated on our Exhibits No. 1 and 2, we have prepared two cross sections to illustrate this point.

MR. TOWNSEND: Mark that Exhibit No. 3.

(Marked Stanolind's Exhibit No. 3, for identification.)

Q I hand you what has been marked as Stanolind's Exhibit No. 3, this is in Case 698 and 699. I think it is applicable to both Cases. I ask you to identify it and explain it.

A This is a cross section A-A' from a southeasterly to a north westerly direction terminating in Stanolind's Southland Royalty Company A-No. 3 well which was completed as a dry hole in the Drinkard. This cross section is comprised of five wells which have been drilled through the Tubb and Blinebry formations and into the Drinkard formation. Two of the wells on this cross section have been completed as Blinebry wells and one as a Tubb well. From an examination of this cross section and the characteristics as indicated by the electrical radioactive logs, it is obvious that both the Tubb and Blinebry formations are easily identifiable over the entire area. It is also apparent that the producing interval in the Blinebry is equally well developed in the Southland Royalty Company A No. 3 as it is in other producing wells in that area which are productive of gas in the Blinebry. A similiar comparison for the Tubb zone

will show that the producing interval in the Southland Royalty Company A - 3 in the Tubb formation is equally as well developed as it is in the other well which is producing from the Tubb formation. I feel we can conclude from this that the producing intervals in the Tubb and Blinebry are continuous and equally as well developed in Southland Royalty Company A-No. 3 as other producing wells in the area.

MR. TOWNSEND: Mark that Exhibit No. 4.

(Marked Stanolind's Exhibit No. 4, for identification.)

Q I hand you what has been marked as Stanolind's Exhibit No. 4 and ask you if it is also a cross section prepared by you under your supervision, to explain it.

A Yes, this is Stanolind's cross section B-B Prime, a north, south cross section including two wells which are currently producing from the Tubb formation, and two which are currently producing from the Blinebry formation. As in the case of the previous cross section, it is readily apparent that both the Tubb and Blinebry zones are easily identified and correlatable over the entire section, and that the producing interval in the Blinebry and the Tubb are correlatable and equally well developed throughout the entire area. We present this cross section to illustrate the fact that upon completion of the dual completions in the Southland Royalty Company A-No. 4 and No. 5, that we encountered commercial production in these two zones.

MR. TOWNSEND: We would like to offer Exhibit 3 and 4 in evidence now.

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

Q Have you prepared individual well logs on these three wells, that is Nos. 3 and 4 and 5?

A Yes, for closer comparison of each of the wells on the proposed proration unit, we have prepared portions of logs of each of the three wells on the proposed unit.

Q I hand you what has been marked as Stanolind's Exhibit No. 5 and ask you to identify it, please.

A It is a portion of the electrical log of Stanolind's Southland Royalty Company A-No. 5 and includes the entire Blinebry and Tubb formations and a portion of the Drinkard.

Q I will hand you what has been marked as Stanolind's Exhibit No. 6 and ask you to identify and explain it.

A That is a similar log on Stanolind Royalty Company A-No. 4.

Q I will hand you what has been marked as Stanolind's Exhibit No. 7 and ask you the same question.

A That is a similar log on Stanolind's Southland Royalty A-No. 3.

MR. TOWNSEND: We would like to offer 5, 6 and 7 in evidence.

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

Q Mr. Hiltz, directing your attention again to the first two exhibits 1 and 2, it is located as you mentioned awhile ago, that this No. 3 well is down structure somewhat from the other wells in the producing area. Do you know of any factor, reservoir factor, which might preclude production from this well in the formations that we are talking about?

A No, I do not. I think the cross sections clearly demonstrate the fact that the producing intervals are continuous over a large area and that the producing intervals are equally well developed and correlatable and a close comparison of the individual logs on the No. 3 well with the logs on the No. 4 and 5 wells will show that

the producing intervals in each of the Blinebry and Tubb formations are developed almost identically and that there is no apparent reservoir characteristic which would preclude in area in the vicinity of the No. 3 well being productive of gas in both the Blinebry and the Tubb.

Q Do you have any information with reference to the western oil fields well to the west of our Well No. 5?

A That well is a direct west offset to Stanolind's Royalty Southland Royal Company A-No. 5 and it is my understanding that the well was drill stemmed tested or day and obtained current commercial production in the Blinebry formation. Since this well is located structural at approximately the same sub sea elevation as the Stanolind Southland Royalty Company A-No. 3, I believe it is logical to conclude that the area will be productive of gas.

Q The information from this well tends to substantiate the conclusions which you have previously stated, is that right?

A That is right.

Q Do you have anything further to add in connection with either or both of these cases?

A Only one further comment, that is that there is no indication from the data that is available to us that either of these producing formations will dip below a water-oil contact and preclude production on the area in question. We have also received from Western Oil Fields, I might add, a waiver to object for formation of that gas proration unit. In each of the two horizons.

MR. TOWNSEND: We will offer in evidence as Stanolind's Exhibit 8 the waiver from Western Oil Field, marked Exhibit 8 in 698 and 9 in 699.

MR. MOORE: I have a question of the witness. Could you give the datum?

MR. SPURRIER: What is your name?

MR. MOORE: My name is J. H. Moore from Hobbs. I own a 40-acre tract of lease interest north of the Stanolind lease. I would like to ask him if he has the sub-sea datum for the Blinebry water level?

A The only information we have is that in the oil producing portion of the Terry-Blinebry field that water was encountered at approximately minus 2560 feet. However, Stanolind completed its Southland Royalty Company A-No. 6 which is indicated as one of the wells on cross section A-A Prime and obtained water free production as low as minus 2632. Now the Blinebry formation in the Stanolind Royalty Company A-No. 3 was encountered at minus 2204 and extended to minus 2736 feet.

Q I would like to ask if you have the water level datum for the Tubb?

A No, sir, I have no information as to a water-oil contact in the Tubb formation. Stanolind Southland Royalty Company A-No. 2, which is located in the northwest quarter of the northeast quarter of Section 9 and is a diagonal southeast offset to the A-No. 3 well, encountered water free production as low as minus 3013 feet. Whereas the Tubb interval in the Southland Royalty A-No. 3 was encountered from minus 2736 feet to minus 3073. There is no indication of water in the Tubb.

MR. MOORE: Thank you.

MR. SPURRIER: Anyone else? If not, the witness may be excused.

(Witness excused.)

MR. SPURRIER: Do you have any more?

MR. TOWNSEND: No, that is all we have.

MR. SPURRIER: Anyone have a further comment in these cases? If not we will take them under advisement.

MR. SPURRIER: The next case on the docket is 700.

C E R T I F I C A T E

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings in the matter of Cases No. 698 and 699 were taken by me on May 19, 1954, that the same is a true and correct record to the best of my knowledge, skill and ability.

Reporter