BEFORE THE
OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO
January 30, 1957

IN THE MATTER OF:

CASE NO. 1203

TRANSCRIPT OF PROCEEDINGS

BEFORE THE
OIL CONSERVATION COMMISSION
Hobbs, New Mexico
January 30, 1957

IN THE MATTER OF:

THE APPLICATION OF STANOLIND OIL AND GAS COMPANY FOR APPROVAL OF AN OIL-GAS DUAL COMPLETION IN THE BLINEBRY OIL POOL AND TUBB GAS POOL, LEA COUNTY, NEW MEXICO, IN EXCEPTION TO RULE 112-A OF THE NEW MEXICO OIL CONSERVATION COMMISSION RULES AND REGULATIONS. APPLICANT IN THE ABOVE STYLED CAUSE SEEKS AN ORDER APPROVING AN OIL COMPLETION IN THE BLINEBRY OIL POOL AND A GAS COMPLETION IN THE TUBB GAS POOL FOR ITS STATE "S" NO. 3 WELL, IN THE SW/4 NW/4 OF SECTION 32, TOWNSHIP 22 SOUTH, RANGE 38 EAST, LEA COUNTY, NEW MEXICO. SAID WELL WAS PROJECTED AS A GAS-GAS DUAL COMPLETION AND AUTHORIZED TO BE DRILLED BY COMMISSION DC-372 WHICH HAS BEEN CANCELLED DUE TO FACT THAT OIL RATHER THAN GAS WAS OBTAINED IN THE BLINEBRY. APPLICANT PROPOSES TO UTILIZE PARALLEL STRINGS OF TUBING TO PRODUCE THE TWO SEPARATE ZONES.

BEFORE:

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: The next case will be Case Number 1203.

MR. GURLEY: Case 1203, the Application of Stanolind Oil and Gas Company for approval of an oil-gas dual completion in the Blinebry Oil Pool and Tubb Gas Pool, Lea County New Mexico, in exception to Rule 112-A of the New Mexico Oil Conservation Commission Rules and Regulations. How many witnesses do we have, one?

J. W. MEEK

having first been duly sworn, testified as follows:

By Mr. E. K. Newman:

Q By whom in the past year were you employed?

A I am employed by Stanolind Oil and Gas Company, as Petroleum Engineer.

Q Have you previously testified before this Commission?

A Yes, I have previously testified before this commission.

Q Are the witnesses qualifications accepted?

MR. NUTTER: They are.

Q Are you familiar with the application in this Case?

A Yes, I am.

Q What is the nature and purpose of the Application?

A The purpose of the Application is to obtain an exception to Commission Rule 112-A to permit dual completion of our State S No. 3. I have here a plat, which is primarily for orientation purposes, on which the State S No. 3 is circled in red. That will be entered as our Exhibit 1.

Q In what pool is the State S No. 3 Well located?

A In the - - the State S No. 3 Well is located in the Tubb Gas Pool, and presently the Blinebry production we are encountering there is undesignated; however, we have filed the Form C-123 to have that well classified in the Blinebry Oil Pool.

Q Would you give the Commission the history of this particular well?

A The history of the State S No. 3, it was completed in 1947 as a Drinkard Oil Well. However, by mid 1956, the Drinkard oil production had declined to approximately 5 barrels of oil and 1 barrel of water per day. Therefore, decided to abandon the Drinkard and dually re-complete the well in the Blinebry and Tubb Gas Horizon. In line with this plan, we filed application and obtained approval to dually re-complete the well in the Tubb and Blinebry Gas Horizons, and this authority was obtained under Commission Order Number DC-372.

Q Would you explain to the Commission what was done in connection this well, following the authority to complete as a gas or a gas dual completion?

A Yes, I will. With the permission of the Commission, I would like to refer to

this electric log of the well on which pertinent work has been listed. On commencing the work, we set a retainer, as noted on this Exhibit, at 6346, and squeezed the Drinkard Formation with 300 sacks of cement. In preceding back up to the hole, in the sequance in which the work was performed, the Tubb Horizon was perforated at 6205' to 6223', 6250' to 6270', and these perforations were then acidized with 25 hundred gallons followed by a 5,000 gallon acid frac. However, in preparation of the Exhibits for this hearing, we noticed that the perforation 6250 to 6270 are below the vertical limits of the Tubb Horizon, so in the final work performed on the well, we propose to go in and plug these perforations with suitable plugging material. So the perforations we will have open in the completion, will be within the vertically defined limits of the Tubb Horizon. Preceding further back up the hole, again in the Tubb Horizon, we perforated from 6,050' to 6155', these perforations are so noted on the Exhibit. Again this interval was acidized with 2500 gallons, followed by a 5000 gallons acid frac. The Tubb Horizon then tested for potential, 4500 MCF per day on a 3/4 inch choke, tubing flowing pressure of 400 pounds. That completed the work on the Tubb and preceding to the Blinebry, first a production packer was set at 5980 feet and part of our dual completion equipment was run at that time. We then backed off from the packer and perforated in the Blinebry horizon, at the interval of 5545 to 5610. That interval was then treated with 3000 gallons of acid followed by 6000 gallons of acid frac. Now, on potential, this horizon tested, flowing, 231 barrels of oil no water, gas-oil ratio of 38 30. And that comprised the work that has been performed to date on this recompletion.

Q If the application in this case is granted, what additional work will be done on the well, to complete it as an oil-gas dual completion?

A The remaining work to be performed, first, of all, we go back in and plug the perforations in the lower Tubb, 6250 to 6270. Then install a dual wellhead, run the individual tubing strings to produce the Blinebry and Tubb through individual strings, then conduct the proper packer-leakage tests.

Q Will there be any commingling of production from separate formations in this well, either in the well bore or in the casing head?

A No, by virtue of the equipment we propose to install, there will be no commingling either in the well bore or in the wellhead. I would like to enlarge on that somewhat, with the exhibits we have here. First of all the well bore diagrams shows the production packer set between the Blinebry and Tubb Horizons. The setting of this packer will effectively prevent communication between the two horizons by virtue of the packing element, and the two opposite sets of slips on the packer and also there will be no communication through the bore of the packer by virtue of the tubing seal nipple incorporated in the Tubb production tubing string. That will effectively prevent any communication within the well bore, and next I have here a diagram of the dual well head, which we propose to install on the well. Now this head will permit hanging two individual tubing strings. They will be hung by the mandrel shown here, and then each individual string will be sealed from communication within the well-head by the 12 1/2 degree Rector seal ring which are so shown upon the diagram. Now, those seals will be around each tubing string, thereby, preventing any communication within the head itself. Along that same line, I have an enlarged diagram which does not necessarily reflect the exact size which will be installed in a well, but it does furnish a blowup of those sealing rings around each individual tubing string.

Q Is there a sealing ring which will go around both tubing heads?

A No, there is not, you can see from this enlarged diagram that there is no groove in your upper flange, which would permit installation of a larger ring in there and leave out the other, your seal has to be from your individual rings around the tubing - individual tubing strings.

Q From what formation is this well now being produced?

A The State S No. 3, is presently being produced from the Blinebry Oil Horizon. The Tubb Gas Horizon is now shut-in.

Q Has there been any production from the Tubb Gas Horizon since the lower said perforations were made?

A The only production that has been experienced from the Tubb was that encountered on the testing.

Q Would the type of equipment plan to be used in this dual completion, will you be able to workover the separate producing horizons without harm to the other producing horizons?

A Yes, we will be able to workover the two individual producing horizons with the equipment we plan to install.

Q Will you be able to make bottom hole pressure tests as to each separate horizon?

A Yes, well - we will.

Q Will the granting of this application, the application in this case, result in the waste?

A No, the granting of this application would not result in any waste.

Q Would it be economically feasible to drill a twin well to the existing well in order to produce each formation to a separate well bore?

A No, it would not at the present time, I could not recommend drilling a twin well to either of these horizons.

Q Would the granting of application permit production of additional oil or gas by making the production economically feasible thereby preventing underground waste?

A Yes, it would.

Q Would correlative rights be in any way affected by the granting of this application?

A No, they would not.

Q Were the exhibits presented to the Commission, prepared by you or under your direction?

A Yes, they were.

Q We would like to offer these, I think you have them in the order here, four, three, four and five. The five exhibits, one through 5, be offered as evidence.

MR. NUTTER: Is there objection to the introduction of Stanolind's Exhibits 1 through 5? If not, they will be received.

Q Would you like additional copies of that, the exhibits?

MR. NUTTER: Two copies will suffice. Do you have anything further?

MR. NEWMAN: That is all.

MR. NUTTER: Does any one have any questions of Mr. Meek?

MR. FISHER: Mr. Meek, will those Blinebry sections flow?

A Yes, it flowed on potential.

MR. FISHER: What type of packer do you have on this production packer noted here?

A That is a Baker Model D.

Q A wire line, an electric line set?

A I think it was set by an electric line.

MR. FISHER: In order to plug off this zone 6250 and 6270, you'll have to drill out your Baker packer, is that right?

A Not necessarily, but as I pointed out, we discovered it just the other day and we have not gone into the details as to how we plan to plug it off, but I think it can be done through the packer. Inother words, if you pull the tubing string and work through the packer bore, go down the tubing and put a suitable plugging material in against those perforations.

Q Will you be sure that then you have plugged off the zone 6250 to 6270? How will you be sure that you have plugged off that zone?

A Well, we can --- we will be able to tag the top of our plugging material there, and we have approximately a 20 foot blank-off between those perforations and the next upper set.

Q If your Blinebry oil ceases to flow and has to be pumped, or you have to blank off either zone to test or do work on the other, how would you do that? Would you - just by shutting in the valve on either tubing, or would you set a psi tool on the top, and set in the head?

A Well, now which do you want first, actually we can go ahead and pump the Blinebry through a separate string if that becomes necessary. We can install the pumping equipment on the Blinebry, if that becomes necessary.

MR. FISHER: And if you have to test either zone, how would you plug off the other zone? Just by shutting in the valves?

A Would you define a little more just what you mean by test here, actually each zone is separated by virtue of the equipment we have in there.

MR. FISHER: Well, I was just wondering if that rector head up there is set for setting a plug?

A You mean like putting a blank choke in your - yes, we can do that.

MR. FISHER: That is all I have.

MR. NUTTER: Does any one else have any questions of the witness? Mr. Meek, as I understand it now, your lower set of perforation, 6250 to 6270 is below the vertical limits of the Tubb Pool?

A Yes, that is right, the vertical limits of the Tubb Gas Pool are defined as 225 feet below the Tubb marker, and this last set of perforations fall 250 feet below the Tubb marker.

MR. NUTTER: I see. What size tubing will be used for these two strings of tubing?

A 2 inch tubing.

MR. NUTTER: 2 inch tubing.

A There is 7 inch casing in the hole. In other words in the Drinkard completion.

MR. NUTTER: Does anyone else have any questions of the witness? If not the witness may be excused. Mr. Fisher -

MR. FISHER: I just have one more question. Is that 7 inch 23 pound pipe?

MR. MEEK: It is 7 inch, I am not sure of the weight at the moment -- according to the completion report I have here, its 7 inch ranging from 20 to 23 pounds per foot.

MR. NUTTER: Mr. Meek, is the 40 acres on which your State S. No. 3 Well is located,

is that dedicated to any Blinebry gas well?

A No.

MR. NUTTER: I see. If there is no further question of Mr. Meek, the witness may be excused. Does anyone have any statements to make in Case 1203? If there are no statements, we will take the case under advisement and the hearing is adjourned.

STATE OF NEW MEXICO)
)
COUNTY OF SANTA FE)

I, GLORIA ALVARADO, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Hobbs, New Mexico, is a true and correct record, to the best of my knowledge, skill and ability.

Dated at Santa Fe, New Mexico this 5th day of March, 1957.

Gloria Alvarado

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1203, heard by me on June 30, 1957.

Examiner
New Mexico Oil Conservation Commission