

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 11, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of Pan American Petroleum Corporation)
for a triple completion, Lea County, New Mexico.)
Applicant, in the above-styled cause, seeks an)
order authorizing the triple completion)
(conventional) of its Southland Royalty "A" Well)
No. 2, located in Unit B of Section 9, Township)
21 South, Range 37 East, Lea County, New Mexico,)
in such a manner as to produce oil from the)
Drinkard and Blinebry formations and gas from the)
Tubb formation through parallel strings of tubing.)

CASE
2661

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 2661.

MR. DURRETT: Application of Pan American Petroleum Corporation for a triple completion, Lea County, New Mexico.

(Whereupon, Applicant's Exhibit No. 1 marked for identification.)

MR. MALONE: May it please the Examiner, Charley Malone for the Applicant, Pan American Petroleum Corporation. We have one witness and one exhibit.

(Witness sworn.)

ROBERT E. SMITH

called as a witness, having been first duly sworn on oath, testified as follows:

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DIRECT EXAMINATION

BY MR. MALONE:

Q Would you state your name and address, please?

A Robert E. Smith, 4303 - 39th Street, Lubbock, Texas.

Q Your occupation?

A I'm a petroleum engineer, senior grade, Pan American Petroleum Corporation.

Q You have not testified before this Commission previously, have you?

A I have not.

Q Would you state your college education and the degree and the year of that degree?

A I received a degree in Bachelor of Science, Electrical Engineering, University of Texas, 1960.

Q Would you state your background and experience in Petroleum Engineering, please?

A I went to work for Stanolind Oil and Gas Company, now Pan American, in 1961, roustabout trainee, and worked in several offices in Midland, Odessa, Andrews, Fort Worth; and I have just recently been transferred to Lubbock, in which case I have been Operations Engineer and Reservoir Engineer and Evaluation Engineer.

Q Does the Lubbock office of Pan American have control and jurisdiction over the area with which this application deals?

A It does.

Q Was Exhibit No. 1 prepared by you?



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A Yes, under my supervision.

Q And under your supervision?

A Yes.

Q And do you, as senior grade petroleum engineer, have jurisdiction over the area described in this application?

A I'm responsible for the reporting of operation to management in this area, yes.

MR. MALONE: Would the qualifications of this witness be satisfactory to the Examiner?

MR. NUTTER: Yes, sir. Please proceed.

Q (By Mr. Malone) Would you state in a summary form what Pan American requests in this application?

A We are requesting permission to triply complete an existing dual well in the Drinkard oil and Tubb gas pools of Lea County, with the Blinebry oil pool of Lea County. The subject well was dually completed in 1954 and is now an existing dual.

Q In other words, this is a work-over to include by triple completion the production of oil from the Blinebry?

A That is right.

Q Now then, where does the Blinebry lie with respect to the Drinkard and Tubb?

A The Blinebry lies immediately above the Tubb formation. Exhibit 3, or attachment 3 of Exhibit 1 is an electrical log of the subject well with the top of the Glorieta marked -- I'm sorry, the top of the -- I beg your pardon, we have mis-marked this log.



This log should show top of Blinebry and base of Blinebry. This was certainly an oversight.

Q Now then, is this well, the Soutland Royalty "A" No. 2 Well, within the defined limits of pools designated for the production of these hydrocarbons?

A It is.

Q In all three zones?

A Yes.

Q Attached to your application there was a map showing the offset operators, was there not?

A That is right.

Q Was notice to those offset operators given by Pan American?

A It was given by Pan American in letter of application, attachment of the application showing the offset operators shown as Attachment 4..

Q In other words, the letter to the Commission dated September 11, 1962, which made this application, was forwarded to all offset operators on that date with a copy of the printed form required by the Commission attached to it, is that correct?

A That is right.

Q And that printed form appears as the last entry in Exhibit 1?

A That is correct.

Q Would you briefly discuss the proposed triple?

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A If you will refer to Attachment 2, it shows a schematic of the proposed triple.

Q Schematic drawing?

A Yes, schematic drawing. This well was drilled in 1947, completed in February of 1948, as a Drinkard single. 7-inch casing was set at a depth of 6740, cemented with 3,000 sacks. Perforations are shown, three sets. It was completed there and produced there until 1954, until which time we received permission to dual it in the Tubb. A Baker Model "D" Packer was set at 6550 feet. We now propose to perforate the Blinebry in an interval to be selected after running another set of logs from somewhere between 5816 and 5956 feet. We will set a second packer; actually we have shown setting a new packer and abandoning the old packer. This will be done after pulling the seal elements, and if they are in such condition that we feel the bottom packer will not hold, we'll run a new packer.

We will then set a packer in between the Tubb and the Blinebry and run three strings of tubing, as shown.

Q So that if the application were granted and this mechanism installed, you would produce the Blinebry oil from the top zone in the new perforations, the Tubb gas from the middle zone, and the Drinkard oil from the lowest zone, is that correct?

A That is correct.

Q Is there anything further with respect to this schematic drawing?



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A Nothing other than to elaborate that this well was completed using three strings of casing originally with 9-5/8 inch casing set at 1409 and cemented with 700 sacks of cement, and surface set at 200 feet. Both the upper strings, our records are vague on whether cement actually circulated on the intermediate string or not. Checking the drilling reports indicated that they cleaned and completed the sealers as though they received cement to the surface.

Q This would be a conventional triple completion through the use of three strings of 2-inch tubing, is that correct?

A That is correct.

Q Going to Attachment No. 3, you've stated that this is a log of the well and that you would like to correct one of the markings in it?

A That is correct.

Q Which one is that?

A The top and bottom Glorieta should be marked top and bottom Blinebry.

Q In other words, all you would like to do is substitute the word "Blinebry" on that log wherever the word "Glorieta" appears, is that correct, or am I incorrect?

A May I check something here to be sure?

Q Yes.

A That was an oversight. What has happened here, in copying the data off the completion report, we show the top of



the Glorieta as correct. We inadvertently left out the Blinebry and I do not have the Blinebry top marked on this log, which I will have to put on there. Without another log to correlate it with right now, I do not have that exact top.

Q Are you willing, upon your return to Lubbock, to mail a letter to the Commission showing the tops on the Blinebry?

A I am.

MR. NUTTER: With the perforated interval.

A Yes. That was certainly an oversight. I don't know how it happened.

Q With respect to Attachment No. 4 in Exhibit 1, this is the information required by the Commission through its printed form, is that correct?

A That is correct.

Q With respect to correlative rights, Mr. Smith, in your opinion would the correlative rights of any offset owner be adversely affected if the Commission granted the right to triply complete in the manner requested?

A They would not.

Q With respect to the correlative rights of the Applicant, Pan American, would those rights be protected by the granting of the application?

A Yes, they would. Pan American would be entitled to recover their fair share of hydrocarbon.

Q That necessarily brings into play the question of



economic waste. Would economic waste be prevented by the granting of this application?

A Yes. Economic waste would be prevented. We would be permitted to triply complete in lieu of having to drill additional wells to develop this Blinebry oil.

Q It would be obviously true that the cost of a triple in this well would only be a fraction of the cost of another well?

A That is right.

Q Do you have anything further to offer to the Commission in your testimony as to this application, Mr. Smith?

A No, I do not.

MR. MALONE: That completes our direct examination, Mr. Examiner.

MR. NUTTER: Does anyone have any questions of Mr. Smith?

CROSS EXAMINATION

BY MR. NUTTER:

Q I note that Blinebry oil will be produced through 1.67 I.D. tubing. Will it be possible artificially to lift the Blinebry if that becomes necessary?

A It may not be. I believe, though, that if it becomes necessary that some method of gas lift or other means will be devised to run a macaroni string or one-inch string of some nature down there to artificially lift it.

Q Now the old Model "D" packer that's set at 6550, that



may be used or may not, depending on the condition of the seals?

A True. This was prepared to show what it would look like if we abandoned that old packer, yes.

Q What is the Otis type "WA" Packer?

A This is a permanent type packer, a competitive packer with the Model "D".

Q You stated you didn't know whether the cement had circulated on the two upper strings of pipe. Do you have the top of the cement on the seven-inch?

A No, sir. In cementing this seven-inch casing, it was actually stage cementing with some difficulty. We ran a Baker multiplex collar at about 5395 and attempted to cement, stage cement, and in doing so it appeared that the wiper plug opened this staging tool and we did not get initial cement. We went back in, then, with 400 sacks of cement. They didn't follow the plug down all the way initially, because they were afraid of cutting out this seat in the staging tool; they didn't know how far it had got, but we went ahead and re-cemented again, in which case it looks like we put away about 330 sacks on the second cement of this lower interval. We then ran the go-devil and tried to open the pours, they didn't open. We ran a temperature survey, we couldn't tell for sure where the top of the cement was, and they perforated then immediately at 5400 feet and attempted to break circulation and could not, and a closer re-examination of the temperature survey indicated that there was a temperature

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gradient break at 4575, and a second at 3,080. We then assumed that we had cement up above the interval, which was at that time the Drinkard, and went ahead to try and tie this in to cover up into the salt. We ran 2600 sacks of cement, at which time they got the plug down to 100 feet above the perforated interval. I beg your pardon, we perforated at 3,075 then and we stopped it. At that time it had circulated out about 25 sacks of cement. There's a possibility of a slight void in here; however, on packer leakage test and everything of the Tubb and Drinkard, we had no indication that we had a bad cement job. We feel like that the cement adequately covers the Blinebry formation.

Q Is it your opinion that the Blinebry and the Tubb is separated by cement behind the plug?

A Yes, sir. Of course, after we go in and test we'll know for sure, but right now we believe it is adequately protected based on temperature survey, which did indicate that we received cement up to 4525 feet at least.

Q Has the Blinebry actually been perforated as yet?

A No, it has not. One other thing in closing I failed to mention was that the Blinebry at this location is currently committed to our Southland Royalty "A" No. 6 for gas, in which case if the well is successfully completed as a Blinebry oil, this 40 acres of course will be removed from the proration unit.

Q Well, on this 160-acre lease, you already have two Blinebry oil wells?



