BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
NOVEMBER 24, 1959

IN THE MATTER OF:

CASE 1818

TRANSCRIPT OF HEARING

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IN THE MATTER OF:

CASE 1818 Application of Texaco Inc., for a gas-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State "BN" Well No. 1, located in the NW/4 SW/4 of Section 25, Township 11 South, Range 32 East, Lea County, New Mexico, in such a manner as to produce gas from the Moore-Wolfcamp Gas Pool and to produce oil from the Moore-Pennsylvanian Pool through the casing-tubing annulus and tubing respectively.

BEFORE:

Elvis A. Utz, Examiner

T R A N S C R I P T O F P R O C E E D I N G S

MR. UTZ: The next case will be 1818.

MR. PAYNE: Case 1818. Application of Texaco Inc., for a gas-oil dual completion.

MR. WHITE: If the Commission please, Charles White of Gilbert, White & Gilbert, Santa Fe, New Mexico, appearing on behalf of the applicant. We have one witness to be sworn at this time.

(Witness sworn)

J. ROBINSON, JR.,

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Will you state your full name, please?

A J. Robinson, Jr.

Q By whom are you employed, Mr. Robinson, and in what capacity?

A Texaco Inc., as a petroleum engineer in our Midland Division.

Q Are you familiar with Texaco's application in Case No. 1818?

A Yes, sir.

Q Will you state what Texaco proposes?

A We propose to dually complete our State of New Mexico "BN" Well No. 1 as a dual Pennsylvanian well and a Wolfcamp gas producer.

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

Q Will you refer to what has been marked Exhibit No. 1 and explain it, please?

A Exhibit No. 1 is a plat that shows Texaco's Inc., State of New Mexico "BN" NCT lease, which is outlined in yellow. The proposed dual well is circled in red, being "BN" No. 1. The wells listed on this plat, as shown on the legend, are

completed in the Devonian Field with the exception of two wells, those two wells being Amerada's State of New Mexico "MA" No. 1, which is a dual Devonian and Wolfcamp producer, and Texaco's "BN" No. 1, which is presently a Pennsylvanian well.

(Whereupon, Texaco's Exhibit No. 2 was marked for identification.)

Q Now, will you refer to Exhibit No. 2 and explain that document, please?

A Exhibit No. 2 is a diagrammatic sketch showing the proposed dual completion installation for our State "BN" No. 1. The well was drilled to a total depth of ten thousand two hundred and thirty-two feet; surface casing of thirteen and three-eights inch casing was set at 346 feet with three hundred fifty sacks of regular cement circulated. Eight and five-eighths inch casing was set at 3540 with the cement being circulated, and the long string was set at TD of ten thousand two hundred and thirty-two feet with four hundred and fifty sacks with a temperature survey which indicated the top of the cement to be 7430.

We made a completion attempt in the Devonian and after we were unsuccessful in gaining production from the Devonian, we set a permanent type Bridge plug and capped it with one sack of Calseal at nine thousand nine hundred and ninety-five feet. The well was completed in the Pennsylvanian zone from 9654 to 9710 in 1952. Presently the well has a hook wall packer set at 9613, and we are flowing the well through the tubing. We have acidized this

well on three previous occasions and have had little success.

Q What production do you get out,from the well now?

A We flow the well approximately twelve hours a day, and we get three barrels of oil per day with a gas-oil ratio of 63,550 to 1. We desire now to frac this well in an effort to improve our production and at the same time dual the well in the Wolfcamp formation. In doing this, we will perforate the Wolfcamp from 8234 to 8260 and 8302 to 8345. We will set a Baker Model "D" Packer at approximately 9600 feet. We will run two and three-eighths inch OD tubing with Otis type "A" sliding side doors at 9630 and at 8250. We will continue producing the Pennsylvanian through two and three-eighths inch tubing, and produce the Wolfcamp through the tubing casing annulus.

Q Do you have any reason to believe that the Wolfcamp would be productive?

A Yes, sir. During the drilling of this well, we took a drill stem test from 8250 to 8411. This drill stem test had a flow of four million two hundred fifty thousand MCF -- I'm sorry -- four thousand two hundred fifty MCF a day with approximately twelve barrels of distillate.

Q Is the Amerada presently producing from this zone?

A Yes, sir. Amerada's well produces between fifteen and twenty barrels of distillate a day and six hundred to seven hundred MCF of that.--

Q And how long has this well been on production, if you

know?

A They completed the well in 1952. It has been producing approximately seven years without being shut-in.

(Whereupon, Texaco's Exhibit No.3 was marked for identification.)

Q Will you refer to what has been marked as Exhibit No.3 and explain the production characteristics?

A Exhibit No. 3 shows the production characteristics of what we expect from these zones. The Pennsylvanian zone which we produce from in our State "BN" No. 1 presently, is a sweet crude with a gravity of fifty-two point four degrees API and has a present gas-oil ratio of 63,550 to 1. Initial bottom hole pressure was 3326 at a minus 5350,taken in September, 1952. The hydrogen sulfide content is negligible in this case.

Q Have you experienced any evidence of corrosion?

A No, sir. In the seven years that we have produced our well in the Pennsylvanian zone, we have had no indication of corrosion.

Q And is this Wolfcamp gas sweet or sour?

A We have every reason to believe that it will be sweet since Amerada's well is a sweet gas well. We have a gas-oil ratio of 40,000 to 1. Their distillate has a sixty-five degree API gravity, and the Wolfcamp bottom hole pressure taken in our well on a drill stem test when the well was drilled was 2930 at a minus 4073 feet. Now, since we have no indication that we will

have any corrosion problems, we have no plans to protect for corrosion. We haven't plastic coated any of the tubing or anything, but should corrosion start occurring, we could squeeze a corrosion inhibitor into the Pennsylvanian zone down the tubing, and we could also squeeze an inhibitor into the Wolfcamp down the casing tubing annulus, or we could go in and close the sliding side door that would be located at approximately 9630, open the other, the upper sliding door and circulate the corrosion inhibitor.

(Whereupon, Texaco's Exhibit No. 4 was marked for identification.)

Q Now, will you refer to what has been marked Exhibit 4, if you will, please?

A Exhibit No. 4 is a radio active log run on Texaco's State "BN" No. 1. Marked in red, the Wolfcamp zone shows a top of 8234 feet with our proposed perforations being from 8234 to 8260, and also from 8302 to 8345. Also marked in red, shows the present perforated interval in the Pennsylvanian zone which is 9654 to 9710.

MR. WHITE: That concludes our testimony. We offer Exhibits 1 through 4 at this time.

Q (By Mr. White) Were these Exhibits prepared by you or under your direction?

A Yes, sir, they were.

MR. UTZ: Without objection, Exhibits 1 through 4 will be accepted.

(Thereupon, Texaco's Exhibits Nos. 1,2,3 and 4 were received in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Robinson, what is the gravity of the crude from the Wolfcamp zone?

A Sixty-five degrees.

Q Would the barrels per million of production be around twenty-five barrels GOR 40,000 to 1?

A I believe it would be. That's approximately right, yes, sir.

Q Do you feel that is quite a bit of liquid to try and lift through five and a half and two and three-eighths inch annulus?

A No, sir, not with the experience from Amerada's well. Their well has five and a half casing set in it. They've produced the Devonian through two and three-eighths inch tubing, and we would have a similar installation, and they have had no problem in lifting this amount of fluid.

Q How long has the Amerada well been completed, do you know?

A Yes, sir, seven years. It was completed August 19th, 1952 for one thousand four hundred and eighty MCF per day with a flowing pressure of 1700 PSI.

Q That's flowing gas from the Wolfcamp?

A Yes, sir.

Q Where is the Amerada well in relation to this one?

A It is three locations due north, located in the SW of the SW of Section 24.

Q No. 1 "MA?"

A Yes, sir.

MR. UTZ: Any other questions of the witness?

QUESTIONS BY MR. PAYNE:

Q Mr. Robinson, what purpose do these Otis sliding side door chokes have other than a method of circulating inhibitor?

A Well, that would be the principal reason why we would want to run it so we could kill our wells any time or treat the wells in that manner.

MR. PAYNE: I see. Thank you.

QUESTIONS BY MR. UTZ:

Q It could also be used to unload the fluids from the Wolfcamp?

A It could be, yes, sir. If we would have trouble in flowing this well, we would then run two strings of two and a sixteenth inch hydril, but we do not expect any difficulty.

MR. PAYNE: That wasn't the principal reason for proposing this particular installation?

A No, sir.

Q (By Mr. Utz) Isn't this Otis sliding side door check set actually a little below the Wolfcamp perforations rather than

above?

A I believe that that is set in between the two. It is set in the upper perforations.

MR. UTZ: Yes, I see, now. Are there any other questions? No other questions, the witness may be excused.

(Witness excused)

MR. UTZ: Any other statements to be made in this case? The case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 9th day of December, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph A. Trujillo
NOTARY PUBLIC

My Commission Expires:

October 5, 1960

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1818, heard by me on Nov. 24, 1959.

Elvis A. Utz, Examiner
New Mexico Oil Conservation Commission