EXAMINER HEARING OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 9, 1958

IN THE MATTER OF: Case No. 1414

TRANSCRIPT OF PROCEEDINGS

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

EXAMINER HEARING OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 9, 1958

IN THE MATTER OF:

Application of The Texas Company for an oil-oil dual completion. Applicant, in the above-styled) cause, seeks an order authorizing the dual completion of its C. H. Weir "B" Well No. 1, located) Case 1414 in the SE/4 NE/4 of Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, in) such a manner as to permit the production of oil from the Skaggs-Drinkard Pool and oil from an undesignated Glorieta oil pool through parallel strings of tubing.

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: Let's take Case 1414.

MR. PAYNE: Case 1414: Application of The Texas Company for an oil-oil dual completion.

MR. UTZ: Are there any appearances in this case?

MR. WADE: H. N. Wade appearing for The Texas Company.

MR. UTZ: Are there any other appearances? You may proceed. (Witness sworn.)

H. N. WADE

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

<u>DIRECT EXAMINATION</u>

By MR. PAYNE:

Would you state your name and position?

DEARNLEY - MEIER & ASSOCIATES GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO Phone CHapel 3-6691

A H. N. Wade, division proration engineer for The Texas Company, Fort Worth.

Q Are you generally familiar with the matters about which your application deals?

- A Yes, sir.
- Q Would you proceed, please?

A I would like to mark that as Exhibit No. 1. Exhibit No. 1 is a plat of the area in the vicinity of the C. H. Weir "B" Lease operated by The Texas Company, on which is located the C. H. Weir "B" No. 1, located 658 feet from the East line, 1984 feet from the North line, Section 11, Township 20 South, Range 37 East. The lease is comprised of 320 acres, being the East Half of the Section. The wells on the lease are designated by producing interval in the legend on the bottom of the page, and all offset acreage is shown with the producing intervals or producing pools of all of the wells on offset acreage.

The subject well was completed 9/28/53. It was drilled to an original total depth of 9671, plugged back to 6898 feet; initial potential was in the Drinkard, 132 barrels of oil, no water; gasoil ratio of 795 in 12 hours. Casing was set, the long string of casing, 5-1/2 inch, 17 pound casing was set at 8,000 feet, cemented with 750 sacks, the cement circulated. The two zones which are requested for dualling here are the Drinkard, which will be producing from the Skaggs-Drinkard Pool, and the Glorieta from an undesignated pool. The most recent test on the Drinkard zone.

which is being produced at present is 20 barrels of oil, no water, gas-oil ratio 7560 in 7 hours on a flowing test. The tubing pressure on this test was 1100 psi. The allowable presently assigned the well is 17, penalized. It is anticipated that the remaining flowing life of this well is somewhat in excess of five years. The gravity of the crude produced is 33 degrees API, it is sweet. The bottom-hole pressure in December, '56, was 2497 psi; we do not have any pressure data in the immediate past, but we estimate, based on the declines that we have noted, that it would be approximately 2400 to 2450 psi at this time.

The Glorieta zone which we propose to open would be perforated from 5266 to 5310 feet. I would like to point out that our application is in error on that portion, in that it designates the Glorieta interval as being 5243 to 5350; the interval shown in the application is the total Glorieta formation and not the zone to be opened.

MR. UTZ: What was that correction?

A The application indicated that the interval to be opened in the Glorieta was 5243 to 5350, that is shown in paragraph "B". The interval actually to be opened is 5266 to 5310. The interval shown in the application is the total Glorieta zone. It is proposed to complete this interval by acidizing and fracturing; and a drill stem test of the Glorieta from 5250 to 5340 on the well recovered 2500 feet of free oil and 180 feet of drilling mud with no water during a two and one-half hour drill stem test. From this information

we anticipate that this will be a top allowable flowing well. The gravity on the drill stem test was indicated to be 416 degrees API, the drill stem test was taken June 17, 1953. The crude showed to be sweet; the pressure on the drill stem test was 1744 on a 15-minute build-up.

Exhibit 2, which has been marked, is self-explanatory, and I will not go into any detailed examination of it, only to say that the equipment to be used, essentially a Baker Model "D" Packer and a Baker parallel string anchor with latching sub, are standard equipment that is normally used in dual completions involving two strings. The only unusual feature, if it could be considered unusual, is the fact that we are proposing to use in this 5-1/2 inch 17 pound casing two strings of 2-1/16 inch OD Hydril Type CS tubing.

In order to assist the Commission somewhat in making a decision concerning this matter, I have determined that The Texas Company has operated a similarly equipped well with both zones pumping, which is located in South Gaines County, it being our J. B. Robertson Well No. 14. The upper zone is completed in the Flanagan-Upper Clear Fork field, with the depth to the pump being 6200 feet. A 1-1/4 inch insert pump is in use, 74 inch stroke, 13 strokes per minute. On a recent test this zone produced lll barrels of oil, 30 barrels of water, with a gas-oil ratio of 245 to 1 in 24 hours. A pumping efficiency of 80.6 percent was calculated. This is considered to be a reasonably good efficiency. The lower

zone in this well is also pumping and is completed in the Flanagan-Clear Fork field. The pump for this zone is set at 6800 feet. On a recent test this zone produced 86 barrels of oil, I barrel of water, with a gas-oil ratio of 13 to 1. It has identical pumping equipment in it, the identical stroke and strokes per minute, as involved in the other zone. On this test, incidentally, the well pumped off. We are using three-quarters and five-eighths inch rods in pumping each zone, and incidentally, have had no difficulty at all in pumping these two zones in this manner. We estimate that if this dual completion is not allowed, it will be necessary for us to spend an additional \$65,000 to drill a single Glorieta well. It is quite doubtful that this expenditure would be made, in view of the fact that the Glorieta, to at least a certain extent, is an unknown quantity; and I feel sure that there will be serious thought given to certainly postponing any development of the Glorieta at this time.

I believe that that is all the information I have to submit.

MR. UTZ: Do you believe that this well can be pumped as efficiently as the well you used as an example in Gaines County?

A At least so, yes, sir.

MR. UTZ: Any other questions? Mr. Nutter.

CROSS EXAMINATION

By MR. NUTTER:

Q Are there any other Glorieta wells in this immediate neighborhood?

- A No, sir, there aren't. This is not a portion of any Glorieta pool, that I was able to determine.
- Q So you have no knowledge as to what to expect in the way of GOR's?
 - A No, I don't.
- Q You don't have any bottom-hole pressures, except what you obtained on a drill stem test?
 - A That is correct.
 - Q 15-minute shut-in?
 - A Yes, sir, that's right.
- Q Do you feel that there is sufficient gravity difference, however, to determine whether a leak should exist in the packer or not?
- A Yes, sir, I think that probably you could detect it with gravity, and certainly with pressures, and the well will be so equipped.
- Q You anticipate there will be a considerable difference in pressures?
- A As indicated by the information we have, I think there will be a differential in pressure across the packer, yes, sir.
- Q When you cemented your pipe in, Mr. Wade, the long string, how many sacks did you use?
 - A 750.
 - Q What was the top of the cement?
 - A It circulated.

- O It circulated?
- A Yes. sir.
- Q That well that you were talking about in Texas, which you said was an identical installation, has parallel strings of 2-1/16 inch?
 - A Exactly the same set-up as in this well.
 - Q What weight of 5-1/2 inch pipe was used in that well?

A 17 pound. It is exactly the same set-up, except it is completed a little bit deeper, both zones, than would be completed in the Weir "B" No. 1.

MR. UTZ: Any other questions?

By MR. PAYNE:

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

A Yes.

MR. PAYNE: Let the record show that his testimony is being received as that of an expert.

MR. WADE: I would also like to move that the Exhibits 1 and 2 be introduced in evidence.

MR. UTZ: Any objection to the introduction of Exhibits 1 and 2? If not, they will be received. Any other statements in this case? If not, the case will be taken under advisement.

(Witness excused.)

* * * * * * * * *

CERTIFICATE

STATE OF NEW MEXICO)) ss COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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 under my personal supervision, 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 3rd day of May, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Searnley NOTARY PUBLIC

My commission expires: June 19, 1959.

I do hereby cartify that the foregoing is a co.p's e read of the proceedings in the English housing of Caso No. 19.

New Mexico Oil Consessation Commission