BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

February 7, 1962

#### EXAMINER HEARING

#### IN THE MATTER OF:

Application of Texaco Inc., for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its State "R" NCT-4 Well No. 1, located in Unit C of Section 7, Township 18 South, Range 35 East, Lea County, New Mexico, as a dual completion (tubingless) in an undesignated Drinkard pool and an undesignated Abo Pool with the production of oil from both zones to be through parallel strings of 2 7/8-inch casing cemented in a common well bore.

CASE NO. 2488'

BEFORE: Daniel S. Nutter, Examiner

#### TRANSCRIPT OF HEARING

MR. NUTTER: We will call the next case, Case No. 2488.

MR. WHITFIELD: Application of Texaco Company, Inc.,

for a dual completion in Lea County, New Mexico.

MR. KELLY: I am Booker Kelly, Gilbert, White & Gilbert Santa Fe, New Mexico, appearing for Texaco Company, Inc. I have one witness and ask for him to be sworn.

(Witness sworn.)

# C. R. BLACK,

called as a witness, having been first duly sworn on oath, was



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examined and testified as follows:

## DIRECT EXAMINATION

## BY MR. KELLY:

- Q Will you state your name?
- A C. R. Black.
- Q By whom are you employed and in what position?
- A I am employed by Texaco Company, Inc., as a petroleum engineer out of Midland, Texas.
  - Q Have you previously testified before this Commission?
  - A Yes, sir, I have.
    - MR. KELLY: Are the witness's qualifications accepted?

      MR. NUTTER: Yes.
- Q (by Mr. Kelly) What does Texaco Company, Inc., seek by their application in this case?
- A It is the application of Texaco Company, Inc., for a dual tubingless completion in their State of New Mexico NCT Well No. 1. This well is to be in the Drinkard-Abo Pool, designated as a Drinkard zone production. Each zone will be produced through our parallel tubing, cemented in a common well bore.
  - Q What is the status of the well now?
- A At the present time, this well has reached a total depth and we have successful completion in the Abo zone. We are currently leading the Drinkard zone.

(Texaco's Exhibits 1 through 3 marked for identification)



Q (by Mr. Kelly) Referring to what has been marked Exhibit No. 1, would you explain that, please, sir?

A Exhibit No. 1 is a plat showing the immediate area surrounding the State of New Mexico "R" lease. The lease is shown bordered in yellow. The subject well is shown circled in red. Also shown are offset operators and their wells with the properly assigned designations being shown below each of the offset wells. At the base of the exhibit is a list showing the offset operators and their mailing addresses. The location of the State of New Mexico "R" No. 1 is 1980 feet from the West line and 330 feet from the North line of Section 7, Township 18 South, Range 35 East.

Q Are there any similar duals in the area?

A The Skelly Hobson Well No. 1 is located approximately three-quarters of a mile east, is a dual completion in the Abo Pool, as an undesignated Drinkard. The Drinkard zone is correlative into the Texaco Company's well. This well is not a tubingless completion. It is a conventional dual completion, but it is employed in the same two zones.

Q Now, referring to Exhibit No. 2, would you explain that, please?

A Exhibit No. 2 is a diagrammatic sketch of the dual completion installation. A 13 3/8-inch hole was drilled to 336 feet. At that point it was cemented with 250 sacks of cement and cement did circulate to the surface. We continued with the



13 3/8-inch hole to 3,128 feet. At that point we set 8 5/8-inch casing and cemented it with 900 sacks. Assuming that we would get fifty percent fillup, the calculated top of the cement was at 1400 feet or 100 feet above the zone. We then continued with a 6 3/4-inch hole to 8,843 feet, which is the total depth. We set two strings of 2 7/8 inch casing and cemented it with a total of 1180 sacks. The top of the cement behind the two long strings was found at 3,000 feet, which was up into the intermediate casing.

Q Can you give the crude characteristics?

The Abo zone was perforated through at various intervals from 5,873 to 8,740. Those perforations are shown on Exhibit 2. The API is 8,983. The gas-oil rates is 1,050 to 2,000. The bottomhole pressure for this well is 3137. This was determined by a 72hour shut-in on the bottomhole pressure on the Texaco Company State of New Mexico Well No 2, located approximately a half mile northeast of the subject well. This pressure was measured at minus 4,795 feet. On potential test dated January 17, 1962, this zone employed 141 barrels of oil and no water in eight hours, with the gas-oil ratio of 1,050 cubic feet per barrel. The tubing pressure was 200 pounds. The Drinkard zone has been perforated through at various intervals from 7,884 to 8,087. It is estimated that there will be an intermediate crude with an API gravity of 32.2. estimated gas-oil ratio is 6000 cubic feet per barrel. The estimated barrels is approximately 100 psi. The last swabbing test, this zone was swabbing 90 barrels of oil in twenty-four hours,



Q Do you expect any corrosion or paraffin problems?

A No, sir. At the present time, we do not. However, the surveys will be taken; if corrosion is found to be existing, we will, at that time, take the necessary steps to prevent corrosion from deteriorating the instal ation.

- Q Are you pumping any of those zones?
- A The Drinkard zone, it is anticipated it will be pumped and the Abo will flow, initially.
- Q Well, if you have to pump both zones, do you expect that you can?

A Yes, sir. If and when it is necessary to pump both zones simultaneously, we can.

Q Now, referring to Exhibit No. 3, would you explain that?

A Exhibit No. 3 is a log of the subject well with the top of the Drinkard reef and the top of the Abo reef being marked and various perforated intervals shown on that log.

Q In your opinion, would the granting of this application be in the best interests of conservation and the prevention of waste?

- A Yes, sir, it would.
- Q Was Exhibit 1, 2 and 3 prepared by you or under your supervision?
  - A Yes, sir.

MR. KELLY: I would move to introduce into evidence



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Texaco's Exhibits 1, 2, and 3.

MR. NUTTER: Texaco's Exhibits 1, 2, and 3 will be entered into evidence.

Are there any further questions of Mr. Black?

# CROSS EXAMINATION

## BY MR. NUTTER:

- Q Mr. Black, how many sacks of cement was used on the 7 5/8" casing?
  - A We used 900 sacks of cement.
  - Q You calculated the top to be 1500 feet?
- A That would be assuming 50% fillup. If we had 100% fillup, we would not circulate.
  - Q And how many sacks for the 2 7/8?
  - A We cemented at that time with a total of 1180 sacks.
- Q And temperature surveys indicated the top was 3,000 feet?
  - A Yes, sir.

MR. NUTTER: Any further questions of Mr. Black?
You may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kelly?

MR. KELLY: That is all.

MR. NUTTER: Does anyone have anything they wish to offer in this case?

We will take the case under advisement.



STATE OF NEW MEXICO )
) ss.
COUNTY OF BERNALILLO)

I, CECIL LANGFORD, NOTARY PUBLIC in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of hearing was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

NOTARY PURLIC

My Commission Expires:

I do hereby certify that the foregoing Is a complete reward of the proceedings in the Examiner hearing of Cace No. 2/8 heard by me on 2/7 1962

New Mexico Oil Conservation Commission

