# DEARNLEY-MEIER REPORTING SERVICE, Inc.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 10, 1962

### EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco Inc., for a quadruple completion, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks permission to complete its G. L. Erwin "B" NCT-2 Well No. 4, located in Unit O of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico, as a quadruple completion (tubingless) in the North Justis-Fusselman, North Justis-Devonian, North Justis Tubb-Drinkard and North Justis-Blinebry Pools, with the production of oil from all zones to be through parallel strings of small diameter casing cemented in a common well bore

Case 2550

BEFORE: Mr. Daniel S. Nutter, Examiner

# TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2550.

MR. MORRIS: Application of Texaco Inc., for a quadruple

completion, Lea County, New Mexico.

MR. WHITE: If the Examiner please, Charles White,

Gilbert, White and Gilbert, Santa Fe, New Mexico, appearing on



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behalf of the applicant. We have one witness to be sworn at this time.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 3 were marked for identification.)

# C. R. BLACK

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

## DIRECT EXAMINATION

## BY MR. WHITE:

- Q Would you state your full name for the record, please?
- A C. R. Black.
- Q By whom are you employed and in what capacity?
- A I am employed by Texaco Inc. as a petroleum engineer out of Texas.
- Q Have you previously testified before the Commission as a petroleum engineer?
  - A Yes, I have.
  - Q Have your qualifications been accepted of record?
  - A They have.
    - MR. WHITE: Is the witness qualified for this hearing?
    - MR. NUTTER: Yes, sir. Please proceed.
  - Q (By Mr. White) Mr. Black, are you familiar with the



subject application?

- A Yes, I am.
- Q Will you briefly state what Texaco is seeking?
- A This is the application of Texaco Inc. for a triple tublingless completion for our G. L. Erwin (a) Well No. 1. This well is triply completed in the North Justis-Devonian, North Justis Tubb-Drinkard and North Justis-Blinebry Pool.
- Q Will you state the location of the well, and in so doing refer to what has been marked Exhibit No. 1?

rounding the Texaco G. L. Erwin L lease. The location of the subject well is shown circled in red, being located in Unit O of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico, with the subject lease being bordered in yellow. The footage location of this well is 330 feet from the south line and 2310 feet from the west line of Section 35, Township 24 South, Range 37 East.

Q Does it also show the offset operators?

A Yes, sir, the offset operators and their wells are shown with the appropriate field designation of each of the offset wells being shown below the wells. Also a list of the offset operators and their mailing address is shown at the base of the exhibit.



MR. MORRIS: Are we on Case 2550? I think the Case 2550 is concerned with the G. L. Erwin "B" NCT-2 Well.

A We are on Case 2551.

MR. NUTTER: We will call Case 2551.

(Whereupon, testimony in Case 2551 was heard.

MR. NUTTER: We will call Case 2550 again.

MR. WHITE: May the record show the same witness and also duly sworn?

MR. NUTTER: Yes, it will.

MR. WHITE: May his qualifications also be of record?

MR. NUTTER: Yes, sir.

## DIRECT EXAMINATION

### BY MR. WHITE:

Q Mr. Black, you are the same witness that testified in the previous Case 2551?

A Yes. sir.

Q Will you, in referring to Case 2550, will you state the location of the subject well?

A Referring to Exhibit 1 in this case, the location of the subject well footagewise is 330 feet from the south line and 1650 feet from the east line of Section 35, Township 24 South, Range 37 East. Exhibit No. 1 is a plat showing the immediate area surrounding the Texaco G. L. Erwin "B" Lease. The Erwin "B"



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Lease is shown bordered in yellow with the subject well circled in red. Also shown are the offset operators, their wells and appropriate field designations for these wells. A list of the offset operators with their mailing addresses is shown at the base of the exhibit.

Q Will you give the status of this particular well?

A At the present time this well has reached total depth and we have completed the Blinebry and Fusselman zones and we are currently in the process of completing in the Tubb-Drinkard and Devonian formations.

Q Will you refer to what has been marked Exhibit No. 2 and give the well history?

Exhibit 2 is a diagrammatic sketch of the triple completion, or the quadruple completion installation, a  $17\frac{1}{2}$  hole was drilled to 255', and at that point we set 13-3/8" casing. Cement was circulated to the surface with 350 sacks. We continued with a  $12\frac{1}{4}$ " hole to 3470'. At that point we set a combination string of 10-3/4" and 9-5/8" at 3470'. This was circulated with 1050 sacks. The top was determined to be at 3755' by temperature survey.

We continued on to total depth, a total depth of 7459. At that point we ran four strings of tubing. This was four strings of 2-7/8" tubing. There were two strings of 2-7/8 and two



strings of 2-3/8. We cemented down all strings with a total of 1924 sacks of cement. The top of the cement is at 1800. The primary cementing operation was then supplemented by squeeze cementing through the Otis Type "A" sliding type doors that were installed in the string designated as string X. The depth of the sliding doors is shown on the exhibit.

Also it will be noted that on the other strings of tubing, on all four strings of tubing we ran short subjects with radio-active collars on each end. The purpose of that was for the gamma ray correlation log in the perforating operations.

Q Have the mechanics of this procedure also been previously approved by the Commission?

A Yes, sir, the mechanics of this completion are the same as the previous case, and they have been approved in other cases by the Commission.

Q Will you give the crude characteristics?

A The Fusselman formation was perforated from 7137' to 7146'. On potential test ending May 4, 1962 the zone flowed 129 barrels of oil in twenty-four hours through 24/64" choke with a GOR too small to measure. This is intermediate sweet crude with a gravity of 37.4 degrees, and the bottom hole pressure is estimated at 2540 psi.

The Siluro-Devonian formation has not been completed at the





present time. However, we do anticipate perforating from 7038 to 7050. We expect an intermediate sweet crude with a gravity of approximately 36 degrees. We estimate the GOR at approximately 700, and we estimate the bottom hole pressure at approximately 2320 psi.

The Drinkard formation, it is anticipated that we will perforate through various perforated intervals as shown on the exhibit from 5990 to 6082. We expect an intermediate sweet crude with a gravity of 32 degrees, and an estimated gas-oil ratio of 900.

Q How about the Blinebry?

A The Blinebry formation was perforated through various perforated intervals from 5454 to 5616, and on potential test ending April 25, 1962 this zone flowed 81 barrels of oil in twelve hours, for a total of 162 barrels of oil for twenty-four hour rate through an 18/64, check with a GOR of 7160. This is a sour crude with a gravity of 36.5 degrees, and the estimated bottom hole pressure is 2450 psi.

Q Do you anticipate any corrosive or paraffin problems in the Blinebry?

A Again, in the Blinebry only we anticipate corrosion and paraffin. We plastic coated the upper 1500° of this tubing string for paraffin control, and we'll conduct periodic coupon



surveys to determine if excessive corrosion is occurring. If we find it is we will take the necessary steps to correct this.

- Q Can the production from these three zones be artificially lifted if the need so requires?
  - A Yes, all four zones.
  - Q Do you have a log of the well?
- A Yes, that's marked as Exhibit No. 3. This log shows the appropriate formation tops and the perforated intervals for each zone.
- Q Have all these four zones been approved for multiple completion in the area?
- A Yes, they have been approved in various multiple completions in the area.
  - Q Would you point out such completions on Exhibit No. 1?
- A Again, the Shell State J. M. immediately south of the subject well is a dual completion in the Fusselman and Devonian. The C. E. Eichman immediately south of the Well No. 2 is a dual completion in the Drinkard and Fusselman, and the J. C. Williamson Westates Well No. 5 in Section 1 is a dual in the Blinebry and Drinkard. And then various formations have been completed in other wells in the area.
- Q Were these exhibits prepared by you or under your direction and supervision?



A Yes, they were.

MR. WHITE: At this time we offer Exhibits 1 through 3.

MR. NUTTER: Texaco's Exhibits 1 through 3 will be admitted in evidence.

MR. WHITE: That concludes our direct examination.

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

(Witness excused.)

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

MR. WHITE: Not in this case.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2550? We will take the case under advisement and call Case 2552.



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STATE OF NEW MEXICO SS COUNTY OF BERNALILLO )

I. ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 31st day of May, 1962.

My commission expires: June 19, 1963.

> I do hereby certify that the foregoing is a complete record of the proceedings the Examiner hearing of Case No. heard by me on .....

Examiner New Mexico Oil Conservation Commission

