CASE NO.

2438

## BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico

November 29, 1961

## EXAMINER HEARING

## IN THE MATTER OF:

Application of Texaco, Inc., for a triple completion, Lea County, New Mexico. Applicant in the above-styled cause, seeks permission to complete its V. M. Henderson Well No. 6, located in Unit C of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion in the Paddock, Blinebry Gas, and Drinkard Pools with the production of oil from the Drinkard formation to be through a tapered string of tubing 2 1/16-inch and 1 1/4-inch diameter and from the Paddock formation to be through a parallel string of 2 1/16-inch tubing and the production of gas from the Blinebry formation to be through the tubing-casing annulus.

BEFORE: Daniel S. Nutter, Examiner

## TRANSCRIPT OF HEARING

EXAMINER NUTTER: We will call Case No. 2438.

MR. WHITFIELD: Application of Texaco, Inc., for a triple completion, Lea County, New Mexico.

MR. WHITE: Charles White of Gilbert, White & Gilbert, representing the Applicant. We have one witness, Mr. Robinson.

J. E. ROBINSON, JR.,



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

## DIRECT EXAMINATION

## BY MR. WHITE:

- Q Would you please state your name?
- A J. E. Robinson, Jr.
- Q By whom are you employed and in what capacity?
- A Texaco, Inc., as a petroleum engineer.
- Q Have your professional qualifications been accepted by the Commission?
  - A Yes, sir, they have.
  - Q Are you familiar with the subject application?
  - A Yes, I am.

MR. WHITE: Are the witness's qualifications acceptable?

EXAMINER NUTTER: Yes, sir, please proceed.

- Q (by Mr. White) Will you briefly state what Texaco is seeking by the subject application?
- A Texaco is seeking approval to triple complete its

  V. M. Henderson Well No. 6 and the Drinkard oil well, a Blinebry
  gas well and a Paddock oil well and to produce the Drinkard
  through a tapered string consisting of 2 1/16-inch OD Aztec
  tubing and a string of 1 1/4-inch Aztec tubing.

(Applicant's Exhibit No. 1

marked.)



Q (by Mr. White) Will you refer to Exhibit No. 1 and explain the information stated thereon?

A Exhibit 1 is a plat showing Texaco's V. M. Henderson lease. It is bordered in yellow, a 320-acre lease occupying the North half of Section 30, Township 21 South, Range 37 East, Lea County. On the plat we show the location of all wells and we also list the field that these wells are completed in. We show the offsetting leases, the offset lease ownership and the addresses of the offset operators. On the V. M. Henderson lease, Well No. 2 is a Blinebry oil well. Well No. 3 is a Drinkard; Well No. 4 is a Eumont gas well; and Well No. 5 is a Penrose Skelly and Paddock dual. On the lease each of the three zones we are proposing to triply complete this well in is productive.

- Q The subject well is circled in red?
- A That is correct, Well No. 6.

(Applicant's Exhibit No. 2 marked.)

Q Will you refer to Exhibit No. 2 and explain your diagrammatic sketch?

A Exhibit No. 2 is a diagrammatic sketch showing the completion of the subject well. An eleven-inch hole was drilled to 1254 feet and a string of 8 5/8-inch casing was set at 1253 feet. It was cemented, with the cement being circulated to the surface of the ground. We went out from under the 8 5/8 with a 7/8 inch hole. We drilled the hole to 6550. We set a string of



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5 1/2-inch casing at 6550. It was cemented with 1,000 sacks of cement with the cement being at 5545. After the casing was cemented, we drilled out below the shoe to 6700 feet.

The Drinkard is completed in open hole from 6550 to 6700 feet. The Blinebry is completed through six different perforations: 5539 to 5543; from 5547 to 5565; from 5569 to 5587; from 5593 to 5610; 5618 to 58; and 5632 to 54.

The Paddock is completed through perforations at 5158 to 5168. The Drinkard is an oil producer, intermediate sweet, API grade of 36 degrees; the GOR is 2,000 and the bottomhole pressure is 2300. It was tested to flow five barrels per hour on a 24/64-inch choke with a tubing pressure of 350 psi.

The Blinebry is a gas well. It was tested to flow 1,940 MCF per day with 90 barrels of condensate. This is a high gravity condensate having an api gravity of 61 degrees. The GOR is 21,600 to one. The well is a gas well in that it exceeds the 52 degree gravity as included in the Blinebry gas rule. It does not have a GOR of 32,000. However, with the condensate it is classified as a gas completion.

The Paddock produces a sour crude. It has a 37 degree api gravity. The GOR is 135 to one. Its estimated bottomhole pressure is 1800 psi. It was completed flowing and it flowed sixteen hours. It made 90 barrels of oil, no water.

- Q What is the present status of the well?
- A The well has been drilled and completed and we are



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presently conducting packer leakage tests. After we perforated the well and treated each zone, we set a Baker Model D packer at 6008 feet, a Baker Model F packer at 5199, and a Baker Model F packer at 5127 feet. This is one of the first trip float tubes that has been designed to run inside the 5 1/2-inch casing and it was made up on the long string, or the Drinkard string, and coming out from under the trip float tube it was necessary to run a string of 1 1/4-inch tubing.

Q What was the reason for that?

A On the body of the trip float tube, since it is in the five and a half, they couldn't get enough steel for the long string to put a 2 1/16-inch tubing collar there and since the outside string, where we'll produce the Blinebry, is a 2 7/8 inch, we have to go to a smaller size tubing to go inside the 2 7/8-inch and still have enough steel to carry the weight, so the Drinkard will be produced through a tapered string consisting of 1 1/4-inch Aztec parallel float tube and 2 1/16-inch tubing above the float.

The Paddock will be produced through a string of 2 1/16-inch tubing and it was originally our intention to flow the Blinebry gas up the tubing casing annulus, but since this well started making a considerable amount of condensate, we have run a string of one-inch Aztec tubing in the hole at 5112 and we'll produce the Blinebry gas through the one-inch tubing.

Are there any crude characteristics that you care to



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FARMINGTON, N. M. PHONE 325-1182 state?

A No, sir. I might say that all of the zones presently are flowing. We estimate that the Drinkard will flow for at least three years and once this zone stops flowing, we'll be able to pump the zone. We can pump approximately 65 barrels per day through a one-inch insert pump having a stroke of 64 inches.

- Q You'll be able to pump the allowable?
- A Yes, sir, we will.
- Q Will you be able to pump the Paddock?

A Yes, sir. We can also pump the Paddock when it ceases to flow. We estimate that it will flow approximately three years.

Q How about the Blinebry?

A No. We won't pump the Blinebry. However, we don't believe that the Blinebry will ever fail to flow with the high GOR that we have and it is producing condensate and as the zone is depleted, you could expect that your GOR will increase, and we never -- we don't anticipate that we would ever have to pump the Blinebry.

(Applicant's Exhibit No. 3 marked.)

Q Will you refer to Exhibit No. 3 and explain the information shown on that exhibit?

A Exhibit No. 3 is a radioactive log of the subject well. The tops of each of the three pays are marked on the log.



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Q Will you state what economic advantages will be gained by this proposed installation?

A If we drilled the well and set 9 5/8-inch casing and 7-inch long string, our cost would have been \$123,600. Under the present completion of the well, we will complete the well for approximately \$104,500, which results in a saving of \$19,100. If we would have drilled two twin wells, the well being completed as a dual and the other as a single, it's estimated that it would cost \$131,754, so the advantages here in our type of completion is \$27,245.

- Q Were Exhibits 1 and 2 prepared by you or under your direction?
  - A Yes, sir.
- Q Are the facts and figures stated on Exhibit 3 correct to the best of your knowledge and belief?
- A Yes, sir. That is a log of the well with the tops marked.
  - Q Do you have anything further to state?
  - A No, sir, I have not.

MR. WHITE: We offer Exhibits 1, 2, and 3.

EXAMINER NUTTER: Exhibits 1 through 3 will be entered in evidence.

MR. WHITE: That concludes our direct.

EXAMINER NUTTER: Are there any questions of Mr. Robin-

son?



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## CROSS EXAMINATION

## BY MR. MORRIS:

Q Mr. Robinson, on your Exhibit No. 2, I believe your testimony corrected the perforation shown in the Blinebry zone to be 5539 to 5543, rather than 5943 as shown on the exhibit.

A That is correct. It is a typographical error. It should be corrected. The first set of perforations should be corrected to read 5539 to 5543.

MR. MORRIS: Thank you.

## CROSS EXAMINATION

## BY EXAMINER NUTTER:

Q According to Exhibit 3, the top of the Drinkard would be 6614 but your Drinkard open hole shows from 6560 to 6700. Will you examine Exhibit 3 and see if, perhaps, the Drinkard has not been labelled incorrectly on that.

A The top should be 6555 -- or 6550.

EXAMINER NUTTER: Are there any other questions of Mr. Robinson?

He may be excused.

(Witness excused.)

EXAMINER NUTTER: Does anyone have anything they wish to offer in Case No. 2438?

The case will be taken under advisement.

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# DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M. PHONE 325-1182 STATE OF NEW MEXICO )

COUNTY OF SAN JUAN )

I, THOMAS F. HORNE, NOTARY PUBLIC in and for the County of San Juan, 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 PUBLIC

My Commission Expires:

October 2, 1965

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1967.

New Mexico Oil Conservation Commission

BUQUERQUE, N.

