

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1162

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BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 11, 1962

EXAMINER HEARING

IN THE MATTER OF:)

)
Application of Gulf Oil Corporation)
for a triple completion, Lea County,)
New Mexico. Applicant, in the above-)
styled cause, seeks permission to)
complete its Graham State (NCT-I))
Well No. 1, located in Unit M of)
Section 19, Township 21 South, Range)
37 East, Lea County, New Mexico, as)
a triple completion (conventional) in)
the Paddock, Blinebry and Drinkard)
Oil Pools with the production of oil)
from all three zones to be through)
parallel strings of tubing.)

Case 2630

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 2630.

MR. DURRETT: Application of Gulf Oil Corporation for
a triple completion, Lea County, New Mexico.

MR. KASTLER: Bill Kastler from Roswell, New Mexico,
appearing on behalf of Gulf Oil Corporation, and our witness
this morning will be John H. Hoover.



(Witness sworn.)

(Whereupon, Applicant's Exhibits 1, 2 and 3 were marked for identification.)

JOHN HOOVER

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. Hoover, will you please state your name, address and occupation?

A John Hoover with Gulf Oil Corporation, Roswell, New Mexico, petroleum engineer.

Q Have you previously appeared before the New Mexico Oil Conservation Commission and testified, qualifying as an expert witness?

A Yes, sir.

MR. KASTLER: Mr. Utz, are the witness's qualifications satisfactory?

MR. UTZ: They are.

Q (By Mr. Kastler) Mr. Hoover, will you explain what Gulf Oil Corporation is seeking in its application No. 2630?

A We are requesting approval of a triple completion (conventional) for our Graham State (NCT-I) Well No. 1 in the



Paddock, Blinebry and Drinkard Oil Pools.

Q Have you prepared a location plat to show the location of the lease and the well in question?

A Yes, sir, and we have marked it Exhibit No. 1.

Q Will you please explain what is shown on Exhibit No. 1?

A This is a plat showing the location of your Graham State (NCT-I) lease and described as Lots 3 and 4 of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico. The Well No. 1 is shown on the plat, or this lease is outlined in red, the well is circled in red, it is located 660 feet from the south and west lines of this Section 19.

Q Has the well been drilled at this time?

A It has been drilled. It is in the process of being completed, drilling was started in July, on July 21, in fact, 1962.

Q Prior to that was this lease held by production?

A Yes, sir.

Q Was it allocated to a gas unit in the Southwest Quarter of Section 19, 21 South, 37 East?

A Yes, sir, it was allocated to a gas unit covering the West Half of Section 19 in the Eumont gas production.

Q Will you please explain what's shown on Exhibit No. 2?

A Exhibit 2 is a log of the well on which we have marked the top and bottom of the producing interval as well as the



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perforated intervals. The Paddock, the top of the pay is 5162 feet, the base of the pay is 5172, the Paddock perforations, these are proposed perforations, 5162 feet to 5169 feet. For the Blinebry, the top of the pay is picked at 5826 feet, the base, 5930 feet, and the Blinebry perforations, which this well has been perforated in the Blinebry, are 5829 feet to 5912. The Drinkard, top of pay is picked at 6560 feet, the base of pay, 6680 feet, and the Drinkard perforations are, as this well has been perforated in the Drinkard, 6635, 6658 feet.

Q Will you please explain what is shown on Exhibit No. 3?

A Yes, sir. Exhibit 3 is the schematic sketch of the proposed triple completion. This well was drilled to a total depth of 6720 feet, plugged back to total depth of 6681 feet, there is 13-3/8" OD casing set at 354 feet, and the cement was circulated. We have 9-5/8" casing set at 3699 feet, and by temperature survey the indicated top of the cement is 2020 feet. We have a 7" liner set at 6717 feet, with the top of the liner inside of the 9-5/8" casing at 3633 feet. This liner was cemented to the top of the liner. We will have three strings of 2-3/8" OD tubing, we will have a Baker Model D packer at 6600 feet. We will have a Baker Model K Double-Grip Snap Set retainer packer run on the long string and set at 5800 feet. We will have a parallel string anchor also on this long string at 5130 feet. The



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intermediate string, or the Blinebry production string, will be latched into the Baker Model K packer; the short string, or the Paddock production, will be latched into the parallel string anchor. I believe that covers the mechanical features of the dual.

Q Is the Baker Model K packer a retrievable packer?

A Yes, sir.

Q Have any other triple completions been made in these three zones which have been approved?

A Yes, sir. Referring to Exhibit 1, Pan American State C-K Well No. 2, which is the Northeast offset to our well, was approved for a triple completion (conventional) by Order No. R-2230 on May 3, 1962.

Q Do you have any bottom hole pressure information?

A Since this well is just in the process of being completed, we do not have any bottom hole pressures on this particular well. However, I have gone to the bottom hole pressures that have been reported in the New Mexico Oil and Gas Engineering Committee Report, total offset wells, and referring to Exhibit 1, the south offset to our well is the Texaco Henderson No. 10. In the Drinkard Pool they reported a bottom hole pressure of 2606 pounds, and that test was June 2, 1962. This same well in the Paddock reported a bottom of 1807 pounds, and the date of that



test was May the 25th, 1962.

Amerada's Warlick A No. 1, which is located in Unit I of Section 19, which is three locations, that would be northeast of our well, reported a bottom hole pressure of 2,072 pounds, in the Blinebry. The date of this test was April 18, 1962. We will anticipate that the pressures in our well would be comparable to these. The reason for presenting these bottom hole pressures, I believe it is evidence that there would be no great differential across any of the packers.

Q Assuming the pressures were the same, what would be the approximate differentials in the two packers?

A Across the Blinebry and the Paddock packers there would be about, it would be less than 200 pounds. Across the Blinebry and the Drinkard packer there would be less than 500 pounds and probably even less than that right on top of the packer when corrected for the packer depth.

Q Does Gulf have any production test information?

A As previously stated, we have not perforated the Paddock, however, we have made some tests on the Drinkard and Blinebry, and I might add that these tests were made immediately after the load oil was recovered. In the Drinkard it flowed 882 barrels of oil, seven barrels of water through 3½" tubing, 17/64" choke in 21 hours; tubing pressure 450 pounds; gas

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volume, 444 MCF per day; gravity of the fluid, 37 at 78 degrees Fahrenheit which would correct to 35.7 at 600 degrees Fahrenheit. That's calculated gas-oil ratio of 1574. The Blinbry flowed 153 barrels of oil, 27 barrels BSW through 3½" tubing, 18/64" choke in 24 hours; gas volume, 181 MCF per day; tubing pressure, 400 pounds; the gravity, 38 at 80 degrees Fahrenheit, which would correct to 36.5 at 60 degrees Fahrenheit. That gives a gas-oil ratio of 1183. We have no test on the Paddock.

Q Do you have anything further to add?

A No, sir, I believe that's all I have.

Q If granted, would this triple completion cause waste or impair correlative rights?

A No, sir.

Q Were Exhibits 1, 2 and 3 prepared by you or at your direction and under your supervision?

A Yes, sir, they were.

MR. KASTLER: This concludes the questions I have, Mr. Examiner. I would like to offer Exhibits 1, 2 and 3 into evidence.

(Whereupon, Applicant's Exhibits 1, 2 and 3 were offered into evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Do you have any opinion as to what the GOR on the



Paddock might be?

A Mr. Utz, the Pan American C-K Well No. 2, from the best information I could find on what they gave at their hearing, they reported a gas-oil ratio of 134 in the Paddock.

Q That would be oil?

A Oh, yes, sir, that would be oil, and we anticipate that all three zones will flow initially.

Q I believe it is correct that you are circulating the cement back up to the top of your 7" liner?

A Yes, sir. It was, and the top of that liner was tested after cementing with 1830 pounds for thirty minutes and held okay.

Q And the packers that you intend to use are shown on your Exhibit 3?

A Yes, sir.

Q And you will run the required zone separation tests?

A Yes, sir.

MR. UTZ: Any other questions of the witness? The witness may be excused.

(Witness excused.)

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

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