

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 21, 1963

EXAMINER HEARING

IN THE MATTER OF:)

Application of Gulf Oil Corporation for)
a dual completion, Lea County, New Mexi-)
co. Applicant, in the above-styled)
cause, seeks approval of its Scarborough) Case 2760
Estate Well No. 7, located in Unit K of)
Section 31, Township 22 South, Range 38)
East, Lea County, New Mexico, as a dual)
completion (conventional) to produce oil)
from the Blinebry Oil Pool and from the)
Ellenburger formation through parallel)
strings of tubing.)

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

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

MR. UTZ: The hearing will come to order. The next case will be 2760.

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

MR. KASTLER: I'm Bill Kastler from Roswell, New Mexico appearing on behalf of Gulf Oil Corporation. Our witness is John H. Hoover.



(Witness sworn.)

MR. UTZ: Are there other appearances? You may proceed.

MR. KASTLER: Mr. Utz, are Mr. Hoover's qualifications well known, as a frequent witness?

MR. UTZ: Well, if they are not known now they never will be.

JOHN H. HOOVER

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. Hoover, will you state what Gulf Oil Corporation is requesting?

A We are requesting an approval for a dual completion for our Scarborough Estate Well No. 7 in the Blinebry oil and an undesignated Ellenburger Oil Pool in Lea County, New Mexico.

Q Has there been any similar dual completion in these two pools?

A No, sir, there hasn't. This is the first. That's the reason for the hearing. In fact, the Ellenburger is a new pool discovery.

Q Where is the nearest Ellenburger production?

A The nearest is in the Brunson Ellenburger located

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approximately three and a half miles Northwest.

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

A Yes, sir. That's the lease plat with our Scarborough Estate lease which is outlined in red. The Scarborough Estate Well No. 7 is circled in red and located 1650 feet from the South and from the West lines of Section 31, Township 22 South, Range 38 East.

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

A Yes, sir. Exhibit No. 2 is a log of the Scarborough Estate No. 7. We have marked on the top of the Glorieta at 5143 feet, the top of the Blinebry at 5505 feet; the base of the Blinebry, 5810. We have shown on this log the proposed Blinebry perforations and they will be in a plane with each plane designated here as 5643 feet, 5664 feet to 5701 feet, 5718 feet, 5745 feet, 5805 feet. We show the top of the Tubb at 6066 feet, the base of the Permian at 7357 feet, the top of the McKee, 7458 feet, the top of the Ellenburger, 7825 feet, the base of the Ellenburger, 7872 feet. The Ellenburger perforations are in the interval 8728 to 8751 feet.

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

A Yes, sir, that is a schematic diagram of the proposed dual completion. The well was drilled to a total depth of



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8074 feet, it was plugged back to 8040 feet. We have 9-5/8" casing set at 1268 feet. It was cemented with 625 sacks and the cement was circulated to the surface. The 7" casing was set at 8074 feet, it was cemented with two stages, in two stages with 985 sacks. Had a D.V. tool at 5842 foot, the temperature survey indicated the top of the cement at 2455 feet. We propose to have two strings of 2-3/8" tubing installed in this 7" casing. We'll have a Baker Model D packer set at approximately 7575 feet. We'll have a Baker parallel string anchor at approximately 5630 feet. We've also shown the proposed Blinebry perforations and the Ellenburger perforations.

Q Mr. Hoover, do you have recent production tests for the Ellenburger and for the Blinebry production?

A Yes, sir. This is a production test in the Ellenburger on our Scarborough Estate No. 7.

Q That's the well?

A This well, yes, sir, dated February 15, 1963. It flowed 162 barrels of oil, no water, 2-3/8" tubing; 12/64 choke in twenty-four hours, the tubing pressure 600 pounds; casing pressure 200 pounds. No measurement was made on the gas volume on this particular test. However, on the previous test it was a ratio of approximately 930. The corrected gravity for the Ellenburger oil is 44.4 degrees. The Blinebry has not been



perforated, therefore, no production tests on this particular well.

However, our Scarborough Estate No. 6, which is a Northeast offset to the No. 7, on a gas-oil ratio test taken in January of this year, it flowed 57 barrels of oil, 6 barrels of water through 2-3/8" tubing; 26/64" choke. Gas volume, 356 MCF; gas-oil ratio of 6,246.

The corrected gravity for the Blinebry production from the Scarborough Estate lease is 43.1 degrees API. The Ellenburger and Blinebry oil are classified as intermediate sweet crude.

Q What bottom hole pressure information is available for these formations?

A The bottom hole pressure was taken in the Ellenburger on January 30, 1963, and the bottom hole pressure at a minus 4,511 feet, which is 7839 feet depth, was 3,033 pounds. We had a bottom gradient of .316 pounds per square inch per foot. The Blinebry, again, has not been perforated. Therefore, I have obtained a bottom hole pressure from our Scarborough Estate Well No. 2, which is located in Unit H of the Section 31. This test was back in April of last year. After 48-hour shut-in indicated a bottom hole pressure of 1944 pounds at a minus 2400 feet. That would be 5757 feet in this well.

The tubing gradient was .319 pounds per foot. Using these



bottom hole pressures and the tubing gradient in calculating the pressures at the packer setting, I calculated it would be 2588 pounds on top of the packer, that's the Model D packer, and 2831 pounds underneath the packer, or a differential of 243 pounds.

Q What are the economics of a dual completion as compared to two single zone wells?

A A single zone Blinebry well is estimated to cost \$70,000. A single zone Ellenburger well, we estimate would cost \$110,000; therefore, for the two wells would be \$180,000. Our estimated cost to dual in the Ellenburger and the Blinebry is approximately \$107,000. Therefore, representing a saving of \$73,000.

Q Is this application in the interest of the prevention of waste and the protection of correlative rights?

A Yes, it is.

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

A Yes, sir.

MR. KASTLER: This concludes my direct examination, Mr. Utz, and I now move that Exhibits 1, 2 and 3 be admitted into evidence.

MR. UTZ: Without objection, Exhibits 1, 2 and 3 will



