BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico July 28, 1960 EXAMINER HEARING IN THE MATTER OF: Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located Case 2035 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. PAYNE: Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

MR. KASTLER: If the Commission please, Bill Kastler of Roswell, appearing on behalf of Gulf. Our witness in this case is also Mr. J. L. McGill.



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MR. PAYNE: Who has testified in Case 2034. Let the record show Mr. McGill has already been sworn.

J. L. McGILL

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. McGill, are you familiar with the W. T. McCormack Well No. 12 of Gulf Oil Corporation and Gulf's proposal to dually complete that well in the Wantz-Abo Oil Pool and the Drinkard Oil Pool?

A I am.

Q I wish to call your attention to what is labeled "Lease Plat", Exhibit No. 1 in Case No. 2035. Will you briefly state what are the confines of Gulf's fee lease and where the proposed well is located?

A Exhibit No. 1 is a lease plat showing the W. T. McCormack lease outlined in green and described as the East Half of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico. Also shown is the W. T. McCormack Well No. 12 circled in red. This is located 1874 feet from the East line and 554 feet from the North line of Section 32. It was originally completed in the Drinkard Pool on April 10, 1948, at a total depth of 7,419 feet and plugged back to 6666 feet, subsequent to an



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unsuccessful attempt to complete in the Silurian through perforations from the interval 7305 to 7400 feet.

Q Are the offset operators also shown on this plat, Exhibit No. 1?

A They are.

Q Have all those offset operators been given a copy of this application?

A They have.

Q To the best of your knowledge, had any of them appeared and contested Gulf's right to dually complete this well?

A To the best of my knowledge, they have not.

Q I now wish to call your attention to what is marked as Exhibit No. 2, Case 2035, "West Texas Electric Log Survey". Will you state what Exhibit No. 2 is and what is shown on Exhibit No. 2, which is pertinent to this case?

A Exhibit No. 2 is a log for the W. T. McCormack No. 12 showing the perforated intervals in the Wantz-Abo and Drinkard Pools. The Drinkard Pool is perforated within the interval 6515 to 6620, effective and produced at the approximate rate of 8 barrels a day and with a trace of water with 69 MCF of gas per day by flowing. However, it is planned to stimulate oil production from the zone during the process of dual completion.

Q In what way are you going to stimulate this production? A We plan to employ fracture treatment.



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Q Fine.

A Work is now in progress and the well has been cleaned out to a depth of 7398 feet; the Silurian perforation between 7305 and 7398 squeeze cemented and the plugged back total depth is 7281. The Wantz-Abo zone is selectively perforated in the interval 7140 to 7270.

Q Has it been perforated at this time?

A It has already been perforated.

Q Have any tests been taken?

A As yet they have not, sir, but on that report the well is flowing.

Q I shall now call your attention to what is labeled Exhibit No. 3 in Case No. 2035, which is Gulf's proposed schematic diagram. Would you please outline what is shown on this schematic diagram or mechanical installation plat?

A The Exhibit No. 3 is a schematic sketch of the proposed mechanical installation of the dual completion. It shows 13-3/8inch OD casing at 311 feet and cemented with 300 sacks of the cement circulated to the surface; 9-5/8 inch OD intermediate set at 2850 feet and cemented with 1300 sacks of cement, and the top of the cement behind the 9-5/8 inch casing is at 535 feet as per a temperature survey. The 7 inch OD oil string is at 7410 feet and cemented with 800 sacks of cement, whose top behind the 7 inch casing is at 3,000 feet as per a temperature survey. The total



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depth is 7419 feet and, as indicated, the plug back TD is 7281 feet.

It is planned to set a Baker Model DA production packer at approximately 6700 feet. This model packer has been used in other dual completions by Gulf and approved by the Commission. The long string will be set at approximately 7200 feet and bull plugged on bottom with a circulating valve in the open position at approximately 7170 feet. Above the Baker Model DA production packer will be a Baker receptacle seal assembly. The purpose of this receptacle seal assembly is to part the tubing for any work to be conducted above the packer with the circulating valve below the packer in the closed position. The Wantz-Abo is effectively and temporarily plugged off. It is also planned to run a parallel tubing string anchor as a part of the long string and set at approximately 6600 feet. It is planned to use two strings of 2-3/8 inch OD upset tubing. The short string will have machined and beveled couplings having an OD of 2.910 inches and will be latched into the tubing string anchor.

Q What are the relative pressures in the Drinkard and Wantz-Abo zones?

A In the Wantz-Abo zone we anticipate a bottom hole pressure of approximately 2800 psi, which is based on a pressure of 2816 psi in our J. N. Carson "A" 11 Well at a depth of 7200 feet, as recorded on February the 12th, 1960. In our Drinkard completion



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it is anticipated that the bottom hole pressure, that is the static bottom hole pressure, will be approximately 1,000 psi.

Q Do you expect the Baker Model DA production packer to adequately insure complete separation between the two zones?

A Yes, we do.

Q If this application is granted, would Gulf perform the necessary tests and other requirements made by the Oil Conservation Commission of New Mexico?

A Yes.

Q Will you please state what the relative saving of cost would be by making a dual completion in this well as opposed to drilling a second well?

A Yes. The estimated cost to dually complete the W. T. McCormack No. 12 in the Wantz-Abo and Drinkard Oil Pools is \$21,000. The estimated cost to drill and complete a new well to the Wantz-Abo Oil Pool is \$100,000. That is based on a 7400 foot hole. Therefore, we have an indicated savings of \$79,000. However, in view of the speculative aspects of this venture, a new well for single completion in the Wantz-Abo will certainly not be attempted at this time. The opportunity afforded by the fact that the prospective Wantz-Abo pay is already penetrated and cased in the well bore of the W. T. McCormack No. 12 makes its evaluation economically feasible.

Q If you were to drill a separate well to the Drinkard

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zone, what would be your cost, or have you calculated that?

It has not been figured prior to this. A

That is some 1600 feet shallower? Q

I would estimate it would be on the order of \$5,000. A

At any rate, it would result in a substantial saving to Q be allowed to dually complete this well?

Would you repeat? Α

Would it result in a substantial saving to the operator Q to be allowed to dually complete this well?

Yes, sir, it certainly would. A

In your opinion would the rights of any royalty owner Q or offset operator be adversely affected by the granting of this application?

To the best of my knowledge they would not be adversely A affected.

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

A They were.

MR. KASTLER: I wish to move for the introduction of Exhibits 1. 2 and 3 in this case. That concludes my questions on direct examination.

MR. NUTTER: Gulf's Exhibits 1, 2 and 3 will be admitted in evidence. Any questions of the witness?

MR. PAYNE: Yes.



MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Is this Model DA packer a permanent type packer?

A That's right, it's a retainer type packer.

Q Did I understand you to say that you had already squeezed the Silurian perforations?

A We have.

Q Your plugged back total depth is 7281 rather than 7270?

A That is right. When the exhibit was first made up we anticipated a plugged back TD on the order of 7270, but it is actually now 7281.

Q Do you have the gravities of the liquid produced from each zone?

A That of the Wantz-Abo is anticipated to be approximately 41.9 degrees corrected, and that, again, is based on the Wantz-Abo completion in our J. N. Carson "A" No. 11. On our Drinkard zone it is 38.1 degrees corrected.

Q

How about relative gas-oil ratios?

A I didn't figure the actual GOR of the Drinkard. It can be figured, as testified earlier, it produces at the rate of 8 barrels of oil a day with 69 MCF of gas. That would be slightly in excess of 8,000 to 1.

Q That's the Drinkard?



PHONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO A That is the Drinkard, that's right. On the Wantz-Abo it is anticipated it will be something below 2,000 to 1, but based on other completions of ours in the past it will probably increase.

MR. PAYNE: Thank you.

BY MR. NUTTER:

Q Now, Mr. McGill, you stated that the Wantz-Abo is presently flowing, is that correct?

A That's right.

Q Has the tubing been run to the Drinkard?

A The statement it is flowing is subsequent to an acid treatment we just applied. We are now in the hole testing it with $2\frac{1}{2}$ -inch tubing and packer. We have not yet put, as indicated on this Exhibit No. 3, we have not yet put that equipment in there yet.

Q You have a temporary string of tubing and temporary packer in there at the present time and you are producing and testing the Abo?

A	For test purposes, yes, sir.
Q	What about the Drinkard, is it shut in?
A	Well, it's packed off.
Q	You have only the one string of tubing in there?
A	One string, yes, sir.
Q	You are not producing anything through the casing?
A	No, sir, we are not.

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MR. NUTTER: Any further questions of the witness? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kastler? MR. KASTLER: Nothing further.

MR. NUTTER: Does anyone have anything further for Case 2035? We will take the case under advisement and call Case 2036.

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 3rd day of August, 1960.

Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of, Case No. 2035 .. heard by me on 7/27, 1960.

New Mexico Oil Conservation Commission

