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R. N. HILLIN OWNER

HILLIN PRODUCTION CO.

P. O. BOX 152 ODESSA, TEXAS 79760

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AREA 915 563-1203 563-3560 October 27, 1980

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O. C. D. ARTERIA, OTPOS

State of New Mexico Energy and Minerals Department Oil Conservation Division P.O. Drawer DD Artesia, New Mexico 88210

Attn: Mr. Mike Williams

RE: DWU #4-0, 34-19-28 Winchester Wolfcamp Packer Leakage Test

Dear Mr. Williams:

Pursuant to our telephone conversation this date, the following information, including well completion diagrams, is furnished for your consideration.

Hillin Production Co. completed the DWU #4 as a dual zone completion in the Winchester Wolfcamp and Morrow formations. Due to the availability of pipe our production string of casing is $5 \ 1/2$ " and the tubing is $2 \ 3/8$ " EUE. Only one string of this dimension tubing can be run inside of $5 \ 1/2$ ", 20# casing.

To complete the Morrow formation a Peabody Vann completion assembly was located below a Baker Loc-Set packer. Immediately above the Baker packer is an Otis 2 3/8" OSTD on/off tool. The Otis OSTD tool accepts an Otis "SN" plug that when positioned seals off the OSTD tool from above and below. The outlined assembly was run into the well on the 2 3/8" tubing string and the packer was set at 10,956.26' on April 29, 1980. The Morrow zone was perforated from 11,006-11,026', stimulated and completed. Morrow shut in pressure was 2100 PSI.

On May 5, 1980, Otis set the "SN" plug in the OSTD tool at 10,954.76'. Tubing pressure was bled to zero. The tubing was then released from the OSTD tool and pulled from the well. With the casing filled with 2% KCL 10# brine the casing was pressured to 1000 PSI and tested for 15 minutes. The test was successful. The packer and plug were both holding. The Baker Loc-Set packer has not been moved since it was originally set.

Mr. Mike Williams Energy and Minerals Department Oil Conservation Division October 27, 1980

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The Wolfcamp zone was perforated from 8997-9046', stimulated and completed. The 2 3/8" EUE tubing production string was run into the well with an Otis "XO" sliding sleeve, in the closed position, located in the string at 9,513.65'. With the tubing latched on to the OSTD on/off tool the Wolfcamp zone was isolated in the annulus. The Wolfcamp shut in casing pressure was 2575 PSI.

With Division approval to produce the Morrow zone the Otis "SN" plug was removed and initial production from this zone went to El Paso Natural Gas Co. on June 10, 1980. Since Hillin Production Company had not filed a C-107 Application for Multiple Completion the Wolfcamp zone remained shut in. Figure 1 shows the downhole production equipment arrangement while the Morrow zone was being produced.

Our application for multiple completion was denied. Approval was granted to produce the Wolfcamp zone thru the tubing string. Since there was a considerable investment to recover, Hillin Production Company elected to produce the Wolfcamp zone because it is the better of the two zones.

On August 12, 1980, a Otis "SN" plug was set in the Otis OSTD on/off tool at 10,954.76'. Tubing pressure was bled to 1400 PSI. Casing pressure was 2575 PSI. Pressures remained constant for 15 minutes. This test was witnessed by the writer and Mr. Jimmy W. Davis, Gray Pumping Service, Inc., Artesia, New Mexico. Otis then shifted the "XO" sliding sleeve open at 9,513.65' letting the Wolfcamp zone into the tubing string. Figure 2 shows this downhole production equipment arrangement. Production was initiated this date to El Paso Natural Gas Co. As of August 13, 1980, the Morrow zone was shut in and El Paso was notifed to terminate charts.

I realize this explanation of our completion procedure is lengthy but this explains why we cannot take the required packer leakage test. From the evidence presented Hillin Production Company is convinced that there is no communication by the Baker Loc-Set packer or between the two producing zones. We hope that your office reaches the same conclusion and will grant an exception to the packer leakage test.

Yours truly,

HILLIN PRODUCTION COMPANY

John D. Boxell Production Engineer

JDB/bjh

Enclosures



Figure 1 - Initial Morrow Production. 6-10-80



Figure 2 - Initial Wolfcamp Production. 8-12-80