

THE APPLICATION OF CONOCOPHILLIPS TO ADOPT FIELD RULES FOR THE HOWARD GLASSCOCK (CLEAR FORK, MI) FIELD, HOWARD COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E., Technical Examiner

Hearing Date: August 25, 2010

Appearances:

Representing:

Jamie Nielson
Greg Cloud

ConocoPhillips Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules (Statewide Rules) for the Howard Glasscock (Clearfork, MI) Field are summarized as follows:

1. 467'-1,200' well spacing;
2. 40 acre oil units with 20 acre tolerance;
3. Allocation based on 100% acreage.

ConocoPhillips Company requests that field rules be adopted as follows :

1. Designation of the field as the correlative interval from 3,151 feet to 4,326 feet as shown on the log of the ConocoPhillips Company G.O. Chalk D No. 27;
2. 330'-660' well spacing;
3. 40 acre oil units, maximum diagonal of 2,100', 20 acre optional units, maximum diagonal of 1,500';
4. Allocation based on 90% acreage and 10% per well. MER top allowable of 168 BOPD.

During the hearing the examiner determined that the applicant desired to maintain the top allowable to all wells regardless of acreage assigned to each well. The examiner

recommend the MER of 168 BOPD be dropped and an allocation formula of 95% per well and 5% acreage be adopted instead. This application was unopposed and the examiner recommends that the field rules for the Howard Glasscock (Clearfork, MI) Field be adopted as requested with the amended allocation formula.

DISCUSSION OF EVIDENCE

The Howard Glasscock (Clearfork, MI) Field was discovered in 1970 at a depth of approximately 3,705 feet. Cumulative production from the field is approximately 7,973,123 BO. As of August 2010, there are 51 active oil wells in the field which in total produce about 287 BOPD. There are eight other operators in the field.

ConocoPhillips requests the designated interval from 3,151 feet to 4,326 feet as shown on the log of the ConocoPhillips Company G.O. Chalk D No. 27 to be designated as the Howard Glasscock (Clearfork, MI) Field. The interval includes the Upper, Middle and Lower Clear Fork dolomites. The gross interval includes numerous small sections with porosity development. ConocoPhillips selectively perforates the sections with adequate porosity which are saturated with hydrocarbons. The hydrocarbon accumulations are thin, lenticular and vary from well to well. A new well drilled next to a depleted well may produce at near virgin rates as these lenticular accumulations were not depleted by the neighboring well. Conoco Phillips request optional 20 acre density to allow infill drilling to recover stranded reserves.

ConocoPhillips recently completed three infill development wells in the field, the Chalk "D" No. 27 (September 2, 2009), the Douthit "B" No. 20 (September 14, 2009) and the Chalk "B" No. 21 (September 8, 2009). The wells were selectively perforated, acid and fractured stimulated over a 700 to 1,000 foot gross interval. The wells potentialized between 60 and 90 BOPD each. ConocoPhillips provided drainage calculations for the three wells recently drilled. The drainage radius calculations demonstrate the need for smaller drilling units. The estimated drainage area for each well ranged from 7 to 22 acres. These calculations are based on a porosity of 7.3%, water saturation of 46.3%, net pay thickness of 218 feet and a recovery factor of 12.5%. The estimated ultimate recovery for the three wells in the field range from 60,000 to 175,000 BO.

Numerous other Clearfork fields in the area have similar 40/20 acre density and 330'/660' spacing as the proposed Howard Glasscock (Clearfork, MI) Field rules.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. Field rules for the Howard Glasscock (Clearfork, MI) Field provide for 467'-1,200' well spacing, 40 acre oil units and allocation based on 100% acreage.

3. The Howard Glasscock (Clearfork, MI) Field was discovered in 1970 and cumulative production from the field is approximately 8.0 MMBO.
4. Current production from the 51 active oil wells in the field is approximately 287 BOPD total.
5. A density rule providing for 40/optional 20 acre units is appropriate for the field.
 - a. The calculated drainage area for the ConocoPhillips, Chalk "D" No. 27, is about 7 acres.
 - b. The calculated drainage area for the ConocoPhillips, Douthit "B" No. 20, is about 22 acres.
 - c. The calculated drainage area for the ConocoPhillips, Chalk "B" No. 21, is about 18 acres.
7. The proposed 330'-660' well spacing will accommodate development on the optional 20 acres.
8. Numerous other Clearfork fields in the area have similar 40/20 acre density and 330'/660' spacing.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Adopting field rules for the Howard Glasscock (Clearfork, MI) Field is necessary to prevent waste and protect correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that field rules for the Howard Glasscock (Clearfork, MI) Field be adopted to provide for 40 acre units with optional 20 acre density and 330'-660' well spacing.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner