

THE APPLICATION OF SOJOURNER DRILLING CORPORATION TO AMEND FIELD RULES FOR THE RICE BROS. (CANYON) FIELD, FISHER COUNTY, TEXAS

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

Hearing Date: February 15, 2008

Appearances:

Representing:

Nguyen (Nick) B. Ngoc

Sojourner Drilling Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unprotested application of Sojourner Drilling Corporation to amend the field rules as adopted in Oil and Gas Docket No. 7B-65,466, issued effective October 20, 1975, for the Rice Bros. (Canyon) Field that currently provide for the following:

1. 467'-1,200' well spacing;
2. 40 acre oil units with 20 acre tolerance;
3. Allocation based on 100% per acreage.
4. Surface casing set in accordance with TWDB letters on each well.

Sojourner Drilling Corporation requests that field rules be adopted as follows :

1. Designation of the field as the correlative interval from 4,448 feet to 4,492 feet as shown on the log of the Ferguson, J.D. No. 1;
2. 467'-600' well spacing;
3. 40 acre density, optional 20 acre units with 10 acre tolerance;
4. Allocation based on 100% acreage.

During the hearing, Sojourner Drilling's representative agreed to designate an interval for the field. This application was unprotested and the examiner recommends that the field rules for the Rice Bros. (Canyon) Field be amended as requested.

DISCUSSION OF EVIDENCE

The Rice Bros. (Canyon) Field was discovered in 1975 at a depth of approximately 4,476 feet. Cumulative production from the field is approximately 1,571,406 BO. Currently there are 8 active oil wells and 3 shut-in water injectors in the field which in total produce about 20 BOPD, 1 MCFD and 165 BWPD. Sojourner Drilling is the only operator in the field.

The Rice Bros. (Canyon) Field is a narrow (approximately 1,000 to 2,000 feet wide) channel sand reservoir. The Canyon sand reservoir consist of the "H" and "G" channel sands. The field was unitized and waterflooded in 1981. Evaluation of the waterflood's performance indicates the east side is watered out prematurely while the western part of the field has not been adequately swept by the injection wells. Sojourner believes permeability profile variations lead to poor sweep efficiencies and premature water breakthrough in the eastern portion of the field. Sojourner believes an estimated 400,000 BO remain in place in the west side of the field that could be recovered if Sojourner drills additional producers and injection wells. Sojourner seeks to reestablish the waterflood by drilling 6 producers and 2 injection wells.

Sojourner Drilling requests an optional 20 acre density and 600' between well spacing for the Rice Bros. (Canyon) Field so that it can place wells in optimum locations within the narrow channel sand reservoir to efficiently sweep and produce the remaining hydrocarbons.

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. Special field rules for the Rice Bros. (Canyon) Field were adopted in Oil and Gas Docket No. 7B-65,466, issued effective October 20, 1975, provide for 467'-1,200' well spacing, 40 acre oil units and allocation based on 100% acreage.
3. The Rice Bros. (Canyon) Field was discovered in 1975 and cumulative production from the field is approximately 1,571,406 BO as of December 31, 2007.
4. Current production from the 8 active oil wells in the field is approximately 20 BOPD, 1 MCFD and 165 BWPD.
5. The field was unitized by Final Order 7B-76,907 and waterflooded in 1981.
6. The Rice Bros. (Canyon) Field produces from the Canyon "H" and "G" sands, a narrow channel sand deposit.

7. Sojourner believes an estimated 400,000 BO remain in place in the west side of the field that could be recovered if Sojourner drills additional producers and injection wells.
8. Development of the field on 20 acre density will allow the flexible placement of well locations within the narrow channel sand reservoir to enhance water flood sweep efficiency to maximize recovery from the field .
9. The proposed 600' between well spacing will accommodate development on 20 acres.

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 Rice Bros. (Canyon) 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 Rice Bros. (Canyon) Field be amended to provide for a correlative interval, optional 20 acre density and 600' between well spacing.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner