# THE APPLICATION OF TORCH PRODUCTION COMPANY, L.L.C. TO AMEND FIELD RULES FOR THE BREEDLOVE "B" (CLEARFORK) FIELD, MARTIN COUNTY, TEXAS

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

Michael Crnich-Legal Examiner

Hearing Date: May 23, 2012

Appearances: Representing:

Keith B. Masters, P.E. Torch Production Company LLC

# **EXAMINERS, REPORT AND RECOMMENDATION**

## STATEMENT OF THE CASE

This is the unprotested application of Torch Production Company LLC for the Commission to amend the Field Rule Nos. 2 & 3 for the Breedlove "B" (Clearfork) Field as adopted in Order No. 08-0236891, effective February 10, 2004, as amended, which currently provides for:

- 1. Designation of the field as the correlative interval from 7,156 feet to 7,490 feet as shown on the log of the Citation Oil & Gas Corp.'s, Erwin Eoff No. 1;
- 2. 467'-1,200' well spacing;
- 3. 80 acre oil units, maximum diagonal of 3,250', 40 acre optional units;
- 4. Allocation based on 100% per well.

Torch Production Company LLC requests that Field Rules be adopted as follows:

- Designation of the field as the correlative interval from 7,156 feet to 7,490 feet as shown on the log of the Citation Oil & Gas Corp.'s, Erwin Eoff No. 1 (no change);
- 2. 233'-467' well spacing;
- 3. 80 acre oil units, maximum diagonal of 3,250', 20 acre optional units, maximum diagonal of 1,500'; 10 acre tolerance;
- 4. Allocation based on 100% per well (no change).

The examiners recommend that the field rules for the Breedlove "B" (Clearfork) Field be amended as requested.

## **DISCUSSION OF EVIDENCE**

The Breedlove "B" (Clearfork) Field was discovered in 1985 at a depth of approximately 7,473 feet. Cumulative production from the field is approximately 976,846 BO. As of May 2012, there are 23 active oil wells and 2 injection wells in the field. There are two other operators in the field, Great Basin Well Service Corp. and W&T Offshore, Inc.

Field rules were first adopted in February 2004, with Oil & Gas Docket 08-0236891. Torch Production operates two waterflood units, the Carter Clearfork Unit and the Mabee Breedlove Clearfork Unit. Torch Production seeks to drill infill wells within the units, produce them initially then convert them to injection wells to expand the waterflood units. Currently there is one injection well on the unit. Torch Production seeks 233'/467' well spacing to allow the drilling of infill wells between existing wells placed on 40 acre units. The 233'/467' well spacing will allow maximum flexibility in locating wells at optimum locations to maximize recovery from the secondary waterflood.

Torch Production requests the addition of 20 acre optional units. The drainage radius calculations demonstrate the need for smaller drilling units. Torch Production provided drainage calculations for 8 wells in the field that were unaffected by the limited waterflood. The estimated drainage area for each well ranged from 11.8 to 116.1 acres. The average drainage area for the 8 wells is 48 acres. These calculations are based on a porosity averaging 6%, water saturation averaging 22.5%, net pay thickness averaging 33 feet and a recovery factor of 15%. The estimated ultimate recovery for the 8 wells in the field range from 8,720 to 117,430 BO.

Numerous other Clearfork fields in the area have 80/20 acre density and flexible well spacing similar to the proposed Breedlove "B" (Clearfork) 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 Breedlove "B" (Clearfork) Field provide for 467'-1,200' well spacing, 80/40 optional oil units and allocation based on 100% per well.
- 3. The Breedlove "B" (Clearfork) Field was discovered in 1985 and cumulative production from the field is approximately 976,846 BO.

- 4. As of May 2012, there are 23 active oil wells and 2 injection wells in the field. Torch Production operates two waterflood units, the Carter Clearfork Unit and the Mabee Breedlove Clearfork Unit.
- 5. A density rule providing for 80/optional 20 acre units is appropriate for the field.
  - a. The estimated drainage area for 8 wells in the two units ranged from 11.8 to 116.1 acres. The average drainage area for the 8 wells is 48 acres.
  - b. The drainage area calculations are based on a porosity averaging 6%, water saturation averaging 22.5%, net pay thickness averaging 33 feet and a recovery factor of 15%.
  - c. The estimated ultimate recovery for the 8 wells range from 8,720 to 117,430 BO.
- 7. The 233 foot leaseline spacing and 467 foot between well spacing will allow Torch to place infill wells between existing wells to maximize oil recovery from the expanded waterflood.
- 8. Numerous other Clearfork fields in the area have similar 80/20 acre density and flexible well 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. Amending field rules for the Breedlove "B" (Clearfork) 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 Breedlove "B" (Clearfork) Field be amended to provide for 233/467 foot well spacing and optional 20 acre density.

# OIL AND GAS DOCKET NO. 08-0275948

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Respectfully submitted,

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Michael Crnich Hearings Examiner