#### OIL AND GAS DOCKET NO. 01-0255375

# THE APPLICATION OF TXCO RESOURCES, INC. TO ADOPT FIELD RULES FOR THE SANER RANCH (SAN MIGUEL) FIELD, MAVERICK AND ZAVALA COUNTIES, TEXAS

**Heard by:** Donna K. Chandler on February 25, 2008

Appearances: Representing:

George Neale Jeff Bookout Ronald Tabery TXCO Resources, Inc.

#### **EXAMINER'S REPORT AND RECOMMENDATION**

# STATEMENT OF THE CASE

TXCO Resources, Inc. requests that field rules be adopted for the Saner Ranch (San Miguel) Field. The proposed rules are summarized as follows:

- 1. Designation of the field as the correlative interval from 1,393 feet to 1,468 feet as shown on the log of the Mary Saner No. 4;
- 2. 165'-330' well spacing;
- 5 acre/optional 2.5 acre density;
- 4. Allocation based on 100% acreage.

This application was unprotested and the examiner recommends that the rules proposed by TXCO Resources, Inc. be adopted on a permanent basis for the Saner Ranch (San Miguel) Field.

# **DISCUSSION OF EVIDENCE**

The Saner Ranch (San Miguel) Field was discovered in 1965. The field is classified as associated-prorated and there are only two producing wells in the field, both oil wells operated by TXCO.

There is currently no defined field interval for the field. TXCO requests that the field be defined as the correlative interval from 1,393 feet to 1,468 feet as shown on the Mary Saner No. 4. This interval includes the entire San Miguel "D" Sand.

The API gravity of the oil in this reservoir is about 10 degrees. In the early 1980's, Conoco and Mobil conducted steamfloods in the field to recover oil from the tar sands. The method was successful but uneconomic at the time. TXCO plans to use the same method, known as Fracture Assisted Steam Technology, on its leases in the field. TXCO's model of the prior Conoco project indicated that up to 50% of original-oil-in-place could be recovered using a 5 acres inverted 5-spot pattern injection pattern. TXCO requests optional 2.5 acre density in the event it is determined that tighter spacing will be more effective in the steamflood.

TXCO requests a spacing rule that requires a minimum of 165 feet from lease lines and 330 feet between wells. This proposed spacing will accommodate 2.5 acre optional development.

# **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Saner Ranch (San Miguel) Field was discovered in 1965. The field is classified as associated-prorated and there are only two producing oil wells in the field, both operated by TXCO.
- 3. The API gravity of the oil in the reservoir is about 10 degrees.
- 4. The Saner Ranch (San Miguel) Field should be defined as the correlative interval from 1,393 feet to 1,468 feet as shown on the Mary Saner No. 4.
- 5. Adoption of a 5 acre/2.5 acre optional density rule for the field is appropriate.
  - a. Steamflooding in the early 1980's was successful but uneconomic.
  - b. It is estimated that as much as 50% of original-oil-in-place can be recovered using the Fracture Assisted Steam Technology method used by Conoco and Mobil in the early 1980's.
  - c. The prior projects were performed on 5 acre inverted 5-spot patterns.
  - d. A greater density may be required to effectively accomplish the nonconventional recovery in this field.

- 6. A spacing rule providing for a minimum of 165 feet from lease lines and 330 feet between wells is standard spacing for 2.5 acre density.
- 7. Allocation based on 100% acreage is a reasonable formula which will protect correlative rights and meet statutory requirements.

### **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. Adoption of the proposed field rules for the Saner Ranch (San Miguel) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

# **RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends that the Commission adopt the field rules proposed by TXCO Resources, Inc. for the Saner Ranch (San Miguel) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner