# THE APPLICATION OF RICKS EXPLORATION, INC. TO CONSIDER ADOPTION OF PERMANENT FIELD RULES AND CANCELLATION OF OVERPRODUCTION IN THE AZALEA, EAST (STRAWN) FIELD, MIDLAND COUNTY, TEXAS

**Heard by:** Donna K. Chandler on June 8, 2000

Appearances: Representing:

Keith Masters Ricks Exploration, Inc.

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

## **STATEMENT OF THE CASE**

Ricks Exploration, Inc. requests that permanent field rules be adopted for the Azalea, E. (Strawn) Field, Midland County. The proposed rules are summarized as follows:

- 1. Designation of the field as the correlative interval from 10,232 feet to 10,466 feet as shown on the log of the Mobil Producing E. T. O'Daniel et al No. 28;
- 2. 467'-933' well spacing;
- 3. 160 acre units with optional 40 acre units for either oil or gas wells;
- 4. Allocation based on 100% deliverability for gas wells and 100% acreage for oil wells;
- 5. Gas-oil ratio rule of 10,000 cubic feet per barrel.

This application was unprotested and the examiner recommends adoption of the field rules proposed by Ricks. Ricks also requests that all accumulated overproduction for its wells be canceled and the examiner recommends approval.

### **DISCUSSION OF EVIDENCE**

The Azalea, East (Strawn) Field was discovered in 1986 upon completion of the O'Daniel No. 28 by Mobil. The discovery well was completed at 10,237-10,419 feet and was initially classified as an oil well. Initial production was approximately 100 BOPD and 900 MCFD. In December 1986, the well was reclassified to gas. Cumulative production from the No. 28 was 472

MMCF of gas.

In February 2000, Ricks completed the Brunson "42" No. 1 as an oil well with an initial potential of 231 BOPD and 879 MCFD. This well has produced 13,400 BO and 55 MMCF of gas through May 2000. Current production is 156 BOPD and 623 MCFD, with a producing gas-oil ratio of over 4,000 cubic feet per barrel.

In April 2000, Ricks completed the McClintic No. 30-1 with an initial potential of 142 BOPD and 1,351 MCFD. This well has produced 2,300 BO and 24,700 MCF of gas through May 2000. Current production is 86 BOPD and 1,314 MCFD with a producing gas-oil ratio of over 15,000 cubic feet per barrel.

The Azalea, East (Strawn) Field is a retrograde condensate reservoir very similar to the SFM (Strawn) Field approximately 2 miles to the southwest. Wells in the subject field will be high gas-oil ratio until the reservoir reaches the dew point pressure. The requested 10,000 cubic feet per barrel gas-oil ratio rule will allow wells to produce without restriction of oil allowable due to high gas-oil ratio.

The average porosity of the Strawn in the Mobil - O'Daniel No. 28 is 7% and the average water saturation is 35%. With ultimate recovery of 472 MMCF, the calculated drainage area for the discovery well is 40 acres. A pressure buildup analysis for the Brunson 42 No. 1 indicates that the well will affect at least 160 acres, possibly as much as 320 acres.

In the area of the Azalea, East (Strawn) Field, the density rules for other Strawn oil fields is either 160 acres or 80 acres. Strawn gas fields in the area are developed on 80 to 320 acre density. The SFM (Strawn) Field operates under 160 acre rules with optional 80 acre density.

Ricks is actively developing the field using 3D seismic to locate the small structural peaks. Flexibility in locating wells is desirable to drill the highs without Rule 37 exceptions.

The two oil wells in the field have accumulated some overproduction as a result of the high producing gas-oil ratios and penalized oil allowables. Adoption of the requested higher gas-oil ratio rule will prevent additional overproduction.

#### 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. The Azalea, East (Strawn) Field was discovered in April 1986 upon completion of the O'Daniel No. 28 by Mobil.

- 3. The O'Daniel No. 28 was initially classified as an oil well but was reclassified to a gas well in December 1986 the well was reclassified to gas.
- 4. Ricks Exploration, Inc. has completed two oil wells in the field in 2000.
- 5. The subject field is a retrograde condensate reservoir above the dew point and producing gas-oil ratios are high, up to 15,000 cubic feet per barrel.
- 6. The Brunson "42" No. 1 has produced 13,400 BO and 55 MMCF of gas and currently produces 156 BOPD and 623 MCFD. Pressure buildup analysis indicates that this well will affect an area of at least 160 acres.
- 7. The McClintic No. 30-1 has produced 2,300 BO and 24,700 MCF of gas in less than two months and currently produces 86 BOPD and 1,314 MCFD.
- 8. The O'Daniel No. 28 had an ultimate recovery of 472 MMCF of gas, resulting in a calculated drainage area of 40 acres.
- 9. Strawn oil fields in the area are typically developed on either 160 acres or 80 acres. Strawn gas fields in the area are developed on 80 to 320 acre density. The SFM (Strawn) Field is the nearest comparable retrograde condensate field and it operates under 160 acre rules with optional 80 acre density.
- 10. A gas-oil ratio rule of 10,000 cubic feet per barrel will prevent assignment of penalized oil allowables. The producing gas-oil ratio cannot be reduced but will decrease when the reservoir pressure falls below dew point.
- 11. Well spacing a minimum of 467 feet from lease lines and 933 feet between wells is the standard spacing for 40 acre density.

### **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 Azalea, East (Strawn) Field will prevent waste, protect correlative rights and promote development of the field.
- 4. Cancellation of overproduction will not harm correlative rights in the field.

# **RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends that the Commission adopt the field rules proposed by Ricks Exploration, Inc. for the Azalea, East (Strawn) Field and that all overproduction be canceled.

Respectfully submitted,

Donna K. Chandler Technical Examiner