THE APPLICATION OF EAGLE ROCK OPERATING COMPANY, LLC TO CONSIDER NEW FIELD DESIGNATION AND TEMPORARY FIELD RULES FOR THE (PROPOSED) EDGEWOOD (COTTON VALLEY) FIELD, VAN ZANDT COUNTY, TEXAS

**Heard by:** Donna K. Chandler on November 17, 2010

Appearances: Representing:

George Neale Rick Johnston Eagle Rock Operating Company, LLC

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

# STATEMENT OF THE CASE

Eagle Rock Operating Company, LLC requests that a new field designation be approved for its J. H. Parker Well No. 1 the Edgewood (Cotton Valley) Field. Eagle Rock requests that the following temporary field rules be adopted for the Edgewood (Cotton Valley) Field:

- 1. Designation of the field as the correlative interval from 9,680 feet to 11,590 feet as shown on the log of the J. H. Parker Well No. 1;
- 2. 467'-1,200' well spacing;
- 3. 160 acre gas units plus 10% tolerance and a maximum diagonal of 4,500 feet:
- 4. Allocation based on 50% deliverability and 50% acreage.

It is recommended that the new field be approved and that temporary field rules be adopted as proposed by Eagle Rock Operating Company.

# **DISCUSSION OF EVIDENCE**

The J. H. Parker Well No. 1 was drilled in 1961 and completed in the Smackover with perforations from 12,834 feet to 12,900 feet. The well produced from the Edgewood (Smackover) Field until January 2010 when Eagle Rock Operating Company recompleted the well to the Cotton Valley. Current perforations are from 11,484 feet to 11,506 feet. On initial test from the Cotton Valley, the well produced at a rate of 1,485 MCFD.

The proposed correlative interval for the field is from 9,680 feet to 11,590 feet as shown on the log of the J. H. Parker No. 1. This interval includes the entire Cotton Valley

sand. There is no comparable production within a 2½ mile radius of the subject well. Additionally, the subject well encountered virgin pressure of 5,337 psi in the Cotton Valley. The well is therefore entitled to a new field designation.

Average porosity of the reservoir is estimated to be 10% and average water saturation is estimated to be 30%. Recoverable gas beneath 160 acres is 1.95 BCF. The estimated ultimate recovery for the J. H. Parker No. 1 is 1.7 BCF of gas, resulting in a calculated drainage area of 136 acres. The Parker No. 1 has already produced 660 MMCF of gas.

Eagle Rock plans to drill as many as five additional wells in this field. The area is near the city limits of Edgewood and there are numerous small tracts. For this reason, 467'-1,200 well spacing is requested to provide flexibility in locating future wells.

A two-factor allocation formula is required for this new field to meet statutory requirements for combining multiple stratigraphic intervals into a single field. Eagle Rock requests that allocation be based on 50% deliverability and 50% acreage.

# 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 J. H. Parker Well No. 1 was drilled in 1961 and completed in the Smackover. The well was recompleted to the Cotton Valley in January 2010 and is perforated from 11,484 feet to 11,506 feet.
- 3. A new field designation is appropriate for the J. H. Parker No. 1 because there is no comparable production within 2½ miles of the well.
- 4. Field rules providing for 160 density is appropriate for the new field.
  - a. Recoverable reserves beneath 160 acres are estimated to be 1.95 BCF.
  - b. The estimated ultimate recovery for the J. H. Parker No. 1 is 1.7 BCF of gas.
  - c. The J. H. Parker No. 1 has produced 660 MMCF of gas to date.
- 5. The Edgewood (Cotton Valley) Field should be defined as the correlative interval from 9,680 to 11,590 feet as shown on the log of the J. H. Parker Well No. 1.

- 6. Well spacing a minimum of 467 feet from lease lines and 1,200 feet between wells will provide flexibility in further development of this field in an area of small tracts near the city limits of Edgewood.
- 7. Allocation based on 50% acreage and 50% deliverability 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. Approval of the requested new field designation and adoption of temporary field rules will prevent waste, protect correlative rights and promote the orderly development of the field.

#### RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the new field designation and adoption of temporary field rules for the Edgewood (Cotton Valley) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner