

**APPLICATION OF ENCORE OPERATING, L.P. TO AMEND THE FIELD RULES FOR THE OVERTON (COTTON VALLEY SAND) FIELD, SMITH, CHEROKEE AND RUSK COUNTIES, TEXAS**

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**HEARD BY:** Richard D. Atkins on November 5, 2008

**WRITTEN BY:** Donna K. Chandler

**APPEARANCES:**

Bill Spencer  
Cary McGregor  
Ann Wiley

George Neale

**REPRESENTING:**

Encore Operating, L.P.

Craton Energy Holdings III, LP

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Field rules for the Overton (Cotton Valley Sand) Field currently provide for the following:

1. Designation of the field as the correlative interval from 10,575 feet to 11,815 feet as shown on the log of the J. F. Ware No. 1;
2. 467-467' well spacing, with no between well spacing limitation between a horizontal and vertical well;
3. 640 acre/optional 40 acre density;
4. Allocation based on 95% acreage and 5% deliverability, with AOF status.

Encore Operating, L.P. requests that the density rule be amended to provide for optional 20 acre units, with no requirement to file individual plats unless the allocation formula is re-instated.

This application was unopposed and the examiner recommends approval of the requested field rule amendment.

### **DISCUSSION OF THE EVIDENCE**

The Overton (Cotton Valley Sand) Field was discovered in 1977 and there are almost 600 gas wells carried in the field. The field is classified as associated-prorated with AOF status. The field has produced over 276 BCF of gas and covers approximately 40,000 acres. In 2003, extensive additional development of the field occurred under the 40 acre density rule.

The main pay in the field is the Taylor Sand series, which has a gross thickness of approximately 200 feet. The field interval includes the Upper Cotton Valley Sand and the Taylor Series, down to the top of the Bossier. The gross field interval is approximately 1,500 feet thick, but few wells are completed in the Upper Cotton Valley.

Encore has actively been developing the field since 2002. In 2002, Encore had less than 15 wells. Currently, Encore operates over 60 wells. Encore has several leases in the field which are developed to density under the 40 acre rule. To support its request for optional 20 acre density, Encore analyzed 10 wells. These 10 wells have cumulative production ranging from 195 MMCF to 935 MMCF. Estimated ultimate recoveries for the 10 wells range from 562 MMCF to 1,469 MMCF. In its drainage calculations, Encore used 7.2% average porosity and 41% average water saturation. Net pay ranges from 38 feet to 95 feet. The calculated drainage areas range from 14 acres to 42 acres.

Encore submitted a tabulation of 12 other Cotton Valley fields which have 20 acre optional units. Many are 640 acres with optional 20 acre density. Additionally, the Cotton Valley is a designated tight formation and small drainage areas are expected.

### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Overton (Cotton Valley Sand) Field was discovered in 1977 and includes the Upper Cotton Valley sands and the Taylor Series.
3. The field operates under rules providing for a designated interval, 467-467' well spacing, with no between well spacing limitation between a horizontal and vertical well, 640 acre/optional 40 acre density and allocation based on 95% acreage and 5% deliverability, with AOF status.

4. Adoption of an optional 20 acre density rule for the field is appropriate.
  - a. For 10 wells studied, average porosity is 7.2% and average water saturation is 41% average. Net pay in the wells ranges from 38 feet to 95 feet.
  - b. Estimated ultimate recoveries for wells studied range from 562 MMCF to 1,469 MMCF.
  - c. The calculated drainage areas for the 10 wells studied range from 14 to 42 acres.
5. At least 12 other Cotton Valley fields have 20 acre optional units.

**CONCLUSIONS OF LAW**

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Amending the field rules to provide for optional 20 acre density will prevent waste, foster conservation and protect correlative rights.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends that Rule 3 of the field rules for the Overton (Cotton Valley Sand) Field be amended to provide for optional 20 acre density.

Respectfully submitted,

Donna K Chandler  
Technical Examiner