

**THE APPLICATION OF ANADARKO E & P COMPANY TO AMEND THE FIELD RULES FOR THE CARTHAGE (COTTON VALLEY) FIELD, PANOLA, HARRISON AND SHELBY COUNTIES, TEXAS**

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**Heard by:** Donna K. Chandler on November 18, 2010

**Appearances:**

Ana Maria Marsland Griffith  
David Christian  
Randy Caber, Jr.

Jim Clark

Flip Whitworth

**Representing:**

Anadarko E & P Company LP

Samson Lone Star, LLC

Lacy Operations, Ltd.

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Field rules for the Carthage (Cotton Valley) Field are summarized as follows:

1. Designation of the field as the correlative interval from 7,940 feet to 9,630 feet as shown on the log of the W. R. Banks Well No. 3;
2. 467'-933 well spacing;
3. 320 acre gas units with optional 40 acre units;
4. Allocation based on 100% acreage, with AOF status.

Anadarko requests that the rules be amended to provide for optional 20 acre density and 330 feet lease line spacing, with the elimination of the between-well spacing requirement.

This application was unopposed and the examiner recommends amending the field rules as proposed.

### **DISCUSSION OF EVIDENCE**

The Carthage (Cotton Valley) Field was discovered in 1968 and there are approximately 3,200 gas wells on the current proration schedule. The designated interval for the field includes several Cotton Valley Sands.

Cross-sections across the field area demonstrate that the Upper Cotton Valley Sands are discontinuous, channel-type sands. In contrast, the Taylor Sand is laterally extensive across the entire field area. It is believed that the Taylor Sand has been drained and recent development is focused on the Upper Cotton Valley Sands.

Anadarko presented drainage area calculations for 20 wells in the field. The net pay in these wells ranges from 108 feet to almost 300 feet and estimated ultimate recoveries range from 1.1 BCF for the Carthage Gas Unit No. 33-7 to 8.5 BCF for the Carthage Gas Unit No. 24-3. The calculated drainage areas for the 20 wells range from 17 acres to 184 acres. Anadarko believes that more dense drilling is necessary to effectively and efficiently drain the reserves from the discontinuous Upper Cotton Valley Sands. Elimination of the between-well spacing requirement will provide the flexibility necessary to place new wells at optimum locations to drain the Upper Cotton Valley Sands.

Anadarko also requests that the requirement for filing individual proration unit plats be eliminated as long as the field is AOF status. Operators must file Form P-15 for each well listing the number of acres assigned to a particular well on a pooled unit.

### **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 Carthage (Cotton Valley) Field provide for a designated interval, 467'-933 well spacing, 320 acre gas units with optional 40 acre units and allocation based on 100% acreage.
3. There are approximately 3,200 gas wells on the current proration schedule.
4. The designated interval for the field includes several Cotton Valley Sands. The Upper Cotton Valley Sands are discontinuous, channel-type sands and the lower Taylor Sand is laterally extensive across the entire field area. Current development is focused on the Upper Cotton Valley Sands.
5. A density rule providing for optional 20 acre units is appropriate for the field.
  - a. The net pay in 20 wells analyzed ranges from 108 feet to almost 300 feet.

- b. Estimated ultimate recoveries for the 20 wells analyzed range from 1.1 BCF to 8.5 BCF.
  - c. The calculated drainage areas for the 20 wells range from 17 acres to 184 acres.
6. Elimination of the between-well spacing requirement will provide the flexibility necessary to place new wells at optimum locations to drain the Upper Cotton Valley Sands.

**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 the field rules for the Carthage (Cotton Valley) 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 field rules for the Carthage (Cotton Valley) Field be amended as set out in the attached Final Order.

Respectfully submitted,

Donna K. Chandler  
Technical Examiner