

February 13, 2007

**OIL AND GAS DOCKET NO. 06-0249860**

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**APPLICATION OF PENN VIRGINIA OIL & GAS L.P. TO AMEND THE FIELD RULES FOR THE CARTHAGE, NORTH (COTTON VALLEY) FIELD, HARRISON AND PANOLA COUNTIES, TEXAS**

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**HEARD BY:** Thomas H. Richter, P.E.

**DATE OF HEARING:** February 9, 2007

**APPEARANCES:**

Bill G. Spencer  
Jim Clark

**REPRESENTING:**

Penn Virginia Oil & Gas L.P.

**EXAMINER'S REPORT AND RECOMMENDATION**  
**STATEMENT OF THE CASE**

This is the unopposed application of Penn Virginia Oil & Gas L.P. for the Commission to consider amending the field rules for the Carthage, North (Cotton Valley) Field. The current field rules were adopted by Order No. 06-0230602, effective April 9, 2002, as amended, that provide for the following:

1. The entire correlative interval from 8,449' to 9,820' as shown on the Array Induction Density-Neutron log of the Fina Oil & Chemical Company, Werner Saw Mill Gas Unit Well No. 6, John Parmer Survey, Panola County, Texas be designated as the Carthage, North (Cotton Valley) Field.
2. An allocation formula based on 95% deliverability and 5% per well and the allocation formula is suspended.

Penn Virginia proposes the following:

1. No Change
2. Minimum oil or gas well spacing of 467'/600' (leaseline/between well);
3. 40 acre gas or oil proration units with a maximum diagonal of 2,100' and optional 20 acre gas or oil density and a maximum diagonal of 1,500'; and
4. No change in allocation formula and continued suspension.

The notice for hearing stated the proposed minimum well spacing of 467'/660' which was in error. Subsequently, an amended notice was sent to all parties that the proposed minimum well spacing should have been 467'/600'. The examiner recommends approval of the proposed amended field rules.

### DISCUSSION OF THE EVIDENCE

The Carthage, North (Cotton Valley) Field was discovered in 1981 at 9,730' subsurface depth. The field is designated as Associated (4 oil wells and over 200 gas well). Currently there are 14 operators in the field. The allocation formula has been suspended since August 1996.

Proration unit density of 40 acres and optional 20 acres is necessary for the efficient and effective depletion of the reservoir. Cumulative field production is 74 BCF of gas and 451,000 barrels of condensate. A majority of the wells were completed in what is designated as the "Taylor" member of the Cotton Valley Formation. The Taylor Sand is located in the lower part of the Cotton Valley interval and is capable of draining 40 acres. However, the Upper and Middle Cotton Valley sections are more heterogeneous, lenticular and limited in areal extent from well to well. Six wells were reviewed with drainage determinations from 13.1 to 39 acres. Ultimate recoveries ranged from 554 MMCF to 1.8 BCF. Pay thicknesses ranged from 78' to 130'.

The proposed minimum well spacing of 467'/600' (lease/between well) will provide for the orderly development of the field and the efficient and effective depletion of the discontinuous, lenticular Upper and Middle Cotton Valley reservoir members.

There is 100% market for all the gas produced from the subject field and the allocation formula should remain suspended.

### FINDINGS OF FACT

1. Notice of this hearing was sent to all parties entitled to notice at least ten (10) days prior to the subject hearing.
2. There was no protest at the call of the hearing.
3. The Carthage, North (Cotton Valley) Field was discovered in 1981 at 9,730' subsurface depth.
  - a. The field is designated as Associated (4 oil wells and over 200 gas well). Currently there are 14 operators in the field.
  - b. The allocation formula is suspended.
4. Proration unit density of 40 acres and optional 20 acres is necessary for the efficient and effective depletion of the reservoir.
  - a. Six wells were reviewed with drainage determinations from 13.1 to 39 acres.
  - b. Ultimate recoveries ranged from 554 MMCF to 1.8 BCF.

5. The proposed minimum well spacing of 467'/600' (lease/line/between well) will provide for the orderly development of the field and the efficient and effective depletion of the discontinuous, lenticular Upper and Middle Cotton Valley reservoir members.
6. There is 100% market for all the gas produced from the subject field and the allocation formula should be suspended.

**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. Consideration for amending field rules for effectiveness are a matter within the Commission jurisdiction.
4. Adoption of the proposed amended field rules will prevent waste, foster conservation and protect correlative rights.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends approval of amending the field rules for the Carthage, North (Cotton Valley).

Respectfully submitted,

Thomas H. Richter, P.E.  
Technical Examiner  
Office of General Counsel