

OIL AND GAS DOCKET NO. 06-0267628

THE APPLICATION OF PENN VIRGINIA OIL & GAS, LP TO AMEND FIELD RULE NO. 2 AND ADOPT FIELD RULE NO. 5 FOR THE HARDWOOD (COTTON VALLEY) FIELD, HARRISON COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: October 22, 2010

APPEARANCES:

REPRESENTING:

APPLICANT:

Bill Spencer
James M. Clark

Penn Virginia Oil & Gas, LP

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Hardwood (Cotton Valley) Field were originally adopted in Final Order No. 06-0254690, effective February 12, 2008, as amended. The Field Rules in effect for the field are summarized as follows:

1. Designation of the field as the correlative interval from 8,350 feet to 10,134 feet as shown on the log of the L. Justice Lease, Well No. 1;
2. 467'-600' well spacing, no minimum between well spacing between vertical and horizontal wells with special provisions for "take points" and "off-lease" penetration point for horizontal drainhole wells;
3. 40 acre gas units with optional 20 acre density;
4. Allocation based on 95% deliverability and 5% per well with AOF status.

Penn Virginia Oil & Gas, LP ("Penn Virginia") requests that Field Rule No. 2 be amended to provide for 330' lease line spacing and no between well spacing with a special provision for a "box rule" for horizontal drainhole wells. Penn Virginia also requests that Field Rule No. 5 be adopted to provide for "stacked laterals" for horizontal drainhole wells and that the allocation formula remain suspended.

The examiner recommends that Field Rule No. 2 be amended and Field Rule No.

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5 be adopted for the Hardwood (Cotton Valley) Field, as proposed by Penn Virginia.

DISCUSSION OF EVIDENCE

The Hardwood (Cotton Valley) Field was discovered in February 1985 at an average depth of 9,800 feet. The field is classified as non-associated and there are 71 producing gas wells with 9 operators carried on the proration schedule. The allocation formula is currently suspended. Cumulative production from the field through August 2010 is 22.6 BCFG and 190.3 MBO.

Penn Virginia is proposing to drill additional horizontal wells and requests horizontal rules in order to promote the efficient and effective development of the remaining hydrocarbons. Penn Virginia requests a spacing rule that requires 330' lease line spacing, no between well spacing with special provisions for "take points", off-lease penetration point and a "box rule" for horizontal drainhole wells. Penn Virginia argues that the proposed spacing is necessary to allow drilling of horizontal wells which may have to be placed very near each other in some cases.

Penn Virginia proposes a tolerance "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception. As drilled wells for which all points are located within the "box" would be considered in compliance with their drilling permits.

Penn Virginia also requests that a Field Rule be adopted to accommodate the drilling of stacked horizontal lateral wells. The gross thickness of the Cotton Valley interval is almost 2,000 feet. Penn Virginia believes that several separate laterals may be necessary to effectively develop the reservoir with horizontal wells. The rule would allow stacked horizontal laterals within the Cotton Valley correlative interval that are drilled from different surface locations to be considered a single well for regulatory purposes. It is proposed that a stacked lateral be defined to be multiple horizontal drainholes which are drilled from different surface locations.

Similar horizontal drainhole well rules have already been adopted in the deeper Carthage (Haynesville Shale) Field and other Cotton Valley Fields, as well as, in the Newark, East (Barnett Shale) Field.

The allocation formula is currently suspended and Penn Virginia requests that it remain suspended, as there is a 100% market for all of the gas produced from the field.

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FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Hardwood (Cotton Valley) Field was discovered in February 1985 at an average depth of 9,800 feet. The field is classified as non-associated and there are 71 producing gas wells with 9 operators carried on the proration schedule.
3. Field rules for the Hardwood (Cotton Valley) Field provide for a designated interval, 467'-600' well spacing, no minimum between well spacing between vertical and horizontal wells with special provisions for "take points" and "off-lease" penetration point for horizontal drainhole wells and 40 acre gas units with optional 20 acre density.
4. The Hardwood (Cotton Valley) Field is actively being developed with horizontal drainhole wells.
5. Field Rules that provide for 330' lease line spacing and no between well spacing with special provisions for "take points", "off-lease" penetration point, a "box rule" and "stacked laterals" for horizontal wells will provide consistency in developing the field and will allow greater flexibility in selecting future drilling locations.
6. The proposed 50 foot "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.
7. The proposed "stacked lateral" rule will allow stacked horizontal laterals within the Cotton Valley correlative interval that are drilled from different surface locations to be considered a single well for regulatory purposes, which will facilitate the additional recovery of gas.
8. Similar horizontal drainhole well rules have already been adopted in the deeper Carthage (Haynesville Shale) Field and other Cotton Valley Fields, as well as in the Newark, East (Barnett Shale) Field.
9. Continued suspension of the allocation formula is appropriate, as there is a 100% market for all the gas produced from the field.

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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 Field Rule No. 2 and adopting Field Rule No. 5 for the Hardwood (Cotton Valley) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission amend Field Rule No. 2 and adopt Field Rule No. 5 for the Hardwood (Cotton Valley) Field, as proposed by Penn Virginia Oil & Gas, LP.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner