

THE APPLICATION OF XTO ENERGY INC. TO AMEND FIELD RULE NO. 2 AND ADOPT FIELD RULE NO. 5 FOR THE BEAR GRASS (COTTON VALLEY CONS) FIELD, FREESTONE, LEON, LIMESTONE AND ROBERTSON COUNTIES, TEXAS

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

DATE OF HEARING: November 10, 2010

APPEARANCES: **REPRESENTING:**

APPLICANT:

Rick Johnston

XTO Energy Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Bear Grass (Cotton Valley Cons) Field were originally adopted in Final Order No. 05-0237426, effective February 24, 2004, as amended. The Field Rules in effect for the field are summarized as follows:

1. Designation of the field as the correlative interval from 12,000 feet to 14,850 feet as shown on the log of the Hunt Petroleum - McAshan Gas Unit, Well No. 2 (API No. 42-289-30464);
2. 467'-600' well spacing, no minimum between well spacing between vertical and horizontal wells;
3. 320 acre gas units with optional 20 acre density and no maximum diagonal;
4. Allocation based on 95% deliverability and 5% per well with AOF status.

XTO Energy Inc. ("XTO") requests that Field Rule No. 2 be amended to provide for 330' lease line spacing for the perpendicular distance measured along the horizontal drainhole, 100' lease line spacing for the first and last take points and no between well spacing with special provisions for "take points", an off-lease penetration point and a "box rule" for horizontal drainhole wells. XTO 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.

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The application was unopposed and the examiner recommends that Field Rule No. 2 be amended and Field Rule No. 5 be adopted for the Bear Grass (Cotton Valley Cons) Field, as proposed by XTO.

DISCUSSION OF EVIDENCE

The Bear Grass (Cotton Valley Cons) Field was discovered in February 2004 at an average depth of 12,000 feet. The field is classified as non-associated and there are 282 producing gas wells with 13 operators carried on the proration schedule. The allocation formula is currently suspended. Cumulative production from the field through June 2010 is 323.8 BCFG and 52.1 MBO.

XTO is proposing to drill horizontal wells and requests horizontal rules in order to promote the efficient and effective development of the remaining hydrocarbons. XTO requests a spacing rule that requires 330' lease line spacing for the perpendicular distance measured along the horizontal drainhole, 100' lease line spacing for the first and last take points, no between well spacing with special provisions for "take points", an "off-lease" penetration point and a "box rule" for horizontal drainhole wells. XTO 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.

XTO requests that Field Rule No. 2 be amended to include language relevant to measurement of distances to lease lines for horizontal drainhole wells. XTO's proposed rule specifies that, for purposes of lease line and between-well spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well. For purposes of assignment of additional acreage pursuant to Rule 86, it is proposed that the distance between the first and last take-point in a horizontal well be used.

In some cases, it is beneficial to penetrate the reservoir off lease, while still having "take points" no closer to lease lines than allowed under the field rules. XTO requests that Field Rule No. 2 also be amended for the subject field to provide for an off-lease penetration point. Statewide Rule 86 requires that the penetration point of a horizontal drainhole be on the lease. In this field, a well generally requires approximately 600 feet to 800 feet of horizontal displacement to make the 90 degree turn from vertical to horizontal. The proposed rule would allow operators to drill horizontal wells with the penetration point, as defined by Rule 86, off of the lease, as long as no take-point is closer than 330' to the lease line for the perpendicular distance measured along the horizontal drainhole and 100' to the lease line for the first and last take points. XTO proposes that an offsite penetration point be allowed after notice to the mineral owners of the off-lease tract on which the penetration point is to be located and if no protest is received.

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XTO 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.

XTO 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 3,000 feet. XTO 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 Cons 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 rules have been adopted in other tight reservoirs, including the Hardwood (Cotton Valley) and Carthage (Haynesville Shale) Fields, as well as, the Newark, East (Barnett Shale) Field.

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

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Bear Grass (Cotton Valley Cons) Field was discovered in February 2004 at an average depth of 12,000 feet. The field is classified as non-associated and there are 282 producing gas wells with 13 operators carried on the proration schedule.
3. Field rules for the Bear Grass (Cotton Valley Cons) Field provide for a designated interval, 467'-600' well spacing, no minimum between well spacing between vertical and horizontal wells and 320 acre gas units with optional 20 acre density.
4. The Bear Grass (Cotton Valley Cons) 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.

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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 rules have been adopted in other tight reservoirs, including the Hardwood (Cotton Valley) and Carthage (Haynesville Shale) Fields, as well as, 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.

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 Bear Grass (Cotton Valley Cons) 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 Bear Grass (Cotton Valley Cons) Field, as proposed by XTO Energy Inc.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner