

THE APPLICATION OF PMO TO AMEND FIELD RULE NOS. 1 AND 2 FOR THE HALLIDAY (WOODBINE) FIELD, LEON AND MADISON COUNTIES, TEXAS

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

DATE OF HEARING: November 9, 2010

APPEARANCES: **REPRESENTING:**

APPLICANT:

Brian Sullivan
Rick Johnston

PMO

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Halliday (Woodbine) Field were originally adopted in Final Order No. 3-53,937, effective August 10, 1964, as amended. The Field Rules currently in effect for the field are summarized as follows:

1. 660'-933' well spacing;
2. 160 acre oil units with optional 80 acre density;
3. Allocation based on 100% acres;
4. Casing Rule;
5. Testing Rule.

PMO requests that Field Rule Nos. 1 and 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, no between well spacing and no maximum diagonal with special provisions for "take points" and an "off-lease" penetration point for horizontal drainhole wells.

The application was unopposed and the examiner recommends that Field Rules Nos. 1 and 2 for the Halliday (Woodbine) Field be amended, as proposed by PMO.

OIL AND GAS DOCKET NO. 03-0267716

DISCUSSION OF EVIDENCE

The Halliday (Woodbine) Field was discovered in May 1964 at an average depth of 8,500 feet. The field is an oil field with 76 producing wells and 10 operators carried on the proration schedule. Cumulative production from the field through August 2010 is 10.2 MMBO and 11.5 BCFG.

PMO is proposing to drill horizontal wells and requests horizontal rules in order to promote the efficient and effective development of the remaining hydrocarbons. PMO 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 and no maximum diagonal with special provisions for "take points" and a "off-lease" penetration point for horizontal drainhole wells. PMO 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.

PMO requests that Field Rule No. 1 be amended to include language relevant to measurement of distances to lease lines for horizontal drainhole wells. PMO'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. PMO requests that Field Rule No. 1 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. PMO 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.

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.

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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 Halliday (Woodbine) Field was discovered in May 1964 at an average depth of 8,500 feet. The field is an oil field with 76 producing wells and 10 operators carried on the proration schedule.
3. Field Rules for the Halliday (Woodbine) Field provide for 660'-933' well spacing, 160 acre oil units with optional 80 acre density and allocation based on 100% acres.
4. A spacing rule which utilizes "take-points" in a horizontal well for determination of distances to lease lines will prevent waste and will not harm correlative rights.
 - a. A take-point in a horizontal well in this field may 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 portion of the wellbore.
 - b. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
 - c. For purposes of assignment of additional acreage pursuant to Statewide Rule 86, the distance between the first and last take-point in a horizontal well should be used.
5. Allowing an off-lease penetration point will result in maximum producing drainhole length, thereby increasing ultimate recovery from horizontal drainhole wells. To protect correlative rights, prior notice and opportunity to object should be given to the mineral owners of offsite surface locations.
6. 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 and no maximum diagonal with special provisions for "take points" and a "off-lease" penetration point for horizontal drainhole wells is appropriate for 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 Nos. 1 and 2 for the Halliday (Woodbine) 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 Nos. 1 and 2 for the Halliday (Woodbine) Field, as proposed by PMO.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner