THE APPLICATION OF HARDING COMPANY FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS DRS LEASE WELL NO. 4H, NEWARK, EAST (BARNETT SHALE) FIELD, PARKER COUNTY, TEXAS

HEARD BY: Donna K. Chandler, Technical Examiner
Richard D. Atkins, Technical Examiner
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HEARING DATE: March 24, 2008

APPEARANCES: REPRESENTING:
John Soule Harding Company
Steven Moses

EXAMINERS’ REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Harding Company requests an exception to Rule 86(d)(4) for its DRS lease Well No. 4H. Harding further requests that all accrued overproduction for the well be canceled.

This application was unprotested and the examiners recommend approval of the requested exception to Statewide Rule 86.

DISCUSSION

Pertinent definitions in Statewide Rule 86 are as follows:

86(a)(2) Horizontal Drainhole: that portion of the wellbore drilled in the correlative interval, between the penetration point and the terminus.

86(a)(3) Horizontal Drainhole Displacement: the calculated horizontal displacement of the horizontal drainhole from the penetration point to the terminus.

86(a)(5) Penetration Point: the point where the drainhole penetrates the top of the correlative interval.
86(a)(6) Terminus: the farthest point required to be surveyed along the horizontal drainhole from the penetration point and within the correlative interval.

Additionally, Statewide Rule 86(d)(4) requires that all points on a horizontal drainhole be within the proration and drilling unit.

In Oil and Gas Docket No. 09-0242843, the following rule was adopted for the Newark, East (Barnett Shale) Field:

Provided, however, that for purposes of the lease line spacing requirement for horizontal wells, the following shall apply:

1. Where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line or subdivision line will be calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus;

2. Where an external casing packer is placed in the well and cement is pumped above the external casing packer to a depth above the top of the Barnett Shale formation, the distance to any property line, lease line or subdivision line will be calculated based on the top of the external casing packer or the closest open hole section in the Barnett Shale.

DRS lease Well NO. 4H

Harding was granted a regular drilling permit for the DRS Lease Well No. 4H on November 3, 2006, with a surface location off-lease. On the Form W-1 filed for the well, the penetration point and terminus were shown to be on the lease at regular locations. After discussions with the drilling contractor, Harding changed the drilling program such that the actual penetration point as defined by Rule 86 was outside the DRS lease. Harding believed that the rules for the field allowed the penetration point to be off-lease, based on the language in the rule referring to distance to perforations for determination of lease-line spacing. On the as-drilled plat filed with the completion papers for the well, the actual penetration point (as defined by Rule 86) was indicated to be off-lease and on the same tract as the surface location. Both the uppermost and lowermost perforations are at legal distances, more than 330 feet from the nearest lease line.

Commission staff has not processed the completion papers or assigned an allowable to the well because the penetration point was off-lease, and not in compliance with Rule 86 because a portion of the horizontal drainhole, as defined by Rule 86, would not be on the lease. Harding thus requested a hearing for exception to Rule 86(d)(4).
The subject well is drilled to a total depth of 9,620 feet (MD) and is cased and cemented, with top of cement behind the casing at 5,764 feet (MD). The penetration point of the Barnett Shale is 6,663 feet (MD). The perforations are from 8,035 feet to 9,368 feet (MD). The penetration point, as defined by Rule 86, is 222 feet off the subject lease. Harding requests that the requested exception be granted to allow the well to produce. The perforations are regular to lease lines pursuant to the special field rules for the Newark, East (Barnett Shale) Field. The distance between the perforations is 1,333 feet. Under Rule 86 and based on this 1,333 feet, Harding would be able to assign an additional 80 acres to the well for proration purposes. However, the lease is only 68 acres and Harding would not benefit in additional acreage assignment by using penetration point to terminus, as allowed determined by Rule 86, instead of perforation to perforation.

Harding is the lessee of a surface lease from the surface owner of the tract on which the surface location for the well is located. Harding is also the lessee of the oil and gas leases covering all mineral interest in the tract on which the surface location is located. Harding is the lessee of oil and gas leases covering all mineral interests in the tracts from the well’s penetration point off-lease to the terminus.

**FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice at least ten (10) days prior to the hearing.

2. Statewide Rule 86(d)(4) requires that all points on a horizontal drainhole be within the proration and drilling unit for a well.

3. Field rules for the Newark, East (Barnett Shale) Field provide that, for purposes of the lease line spacing requirement for horizontal wells which are cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line or subdivision line will be calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus.

4. Harding was granted a regular drilling permit for the DRS No. 4H on November 3, 2006, with a surface location off-lease.
   a. The locations for the penetration point and terminus indicated on the Form W-1 were indicated to be on-lease.
   b. The actual penetration point of the well, as defined by Rule 86, is outside the DRS lease.
   c. The uppermost and lowermost perforations in the well are at legal distances, being more than 330 feet from any lease line.
5. Because a portion of the horizontal drainhole, as defined by Rule 86, would not be on the subject lease, completion papers for the well have not been processed and an allowable has not been assigned.

6. The subject well is drilled to a total depth of 9,620 feet (MD) and is cased and cemented, with top of cement behind the casing at 5,764 feet (MD). The penetration point of the Barnett Shale is 6,663 feet (MD). The perforations are from 8,035 feet to 9,368 feet (MD).

7. Harding is the lessee of a surface lease from the surface owner of the tract on which the surface location of the DRS No. 4H is located. Harding is also the lessee of the oil and gas leases covering all mineral interest in the tract on which the surface location, penetration point and terminus of the subject well are located. Harding is the lessee of oil and gas leases covering all mineral interests in the tracts within 330 feet of the subject well from its penetration point off-lease to its terminus.

8. The horizontal drainhole displacement for the DRS No. 4H shall be the distance between the perforations, which is 1,333 feet.

**CONCLUSIONS OF LAW**

1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.

2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.

3. The requested exception is not intended to circumvent Commission rules regarding spacing and assignment of acreage.

4. Approval of the requested exception to Rule 86(d)(4) will prevent waste and will not harm correlative rights.

**EXAMINERS’ RECOMMENDATION**

The examiners recommend that the requested exception to Rule 86(d)(4) be approved for the DRS No. 4H to allow the penetration point, as defined by Rule 86, to be off-lease.

Respectfully submitted,

Donna K. Chandler
Technical Examiner

Marshall F. Enquist
Hearings Examiner