APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS BEDINGER-SOUTH LEASE WELL NO. 1H, NEWARK, EAST (BARNETT SHALE) FIELD, PARKER COUNTY, TEXAS

#### OIL AND GAS DOCKET NO. 09-0256894

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APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS DAY LEASE WELL NO. 10H, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

# **OIL AND GAS DOCKET NO. 09-0256895**

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS DAY LEASE WELL NO. 9H, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

**HEARD BY:** Donna Chandler, Technical Examiner

**HEARING DATE:** May 19, 2008

APPEARANCES: REPRESENTING:

Sandra Bolz Buch Mike Roberts Annette Raines Devon Energy Production Company, L.P.

#### **EXAMINER'S REPORT AND PROPOSAL FOR DECISION**

## STATEMENT OF THE CASE

Devon Energy Production Company, L.P. requests an exception to Rule 86(d)(4) for the following wells completed in the Newark, East (Barnett Shale) Field:

Bedinger-South Well No. 1H Day Well No. 9H

Day Well No. 10H

These three wells will be referred to jointly in this Examiners' Report as "the Wells." Exceptions are necessary because the penetration point for each well, as defined by Rule 86, is not on the lease for the well. Devon further requests that all accrued overproduction for each of the wells be canceled.

These applications were unprotested and the examiners recommend approval of the requested exceptions to Statewide Rule 86.

# **DISCUSSION OF THE EVIDENCE**

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:

 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;

Devon was granted regular drilling permits for the Bedinger-South Well No. 1H and the Day Wells Nos. 9H and 10H with a surface location off lease. The locations for the penetration point and terminus on Form W-1 were actually the proposed uppermost and lowermost perforations in the well. Because the Form W-1 requests distances to penetration point and terminus and the Newark East (Barnett Shale) Field rules provide that the distance to lease line will be calculated based on distance to the nearest perforation where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, Devon understood this to be the appropriate information to be provided on the Form W-1. The actual penetration point as defined by Rule 86 was outside the lease for each well.

The as-drilled plat filed with the completion papers for each well indicated the penetration point for the well was off-lease on the same tract as the surface location. However, both the uppermost and lowermost perforations in each well are at legally permitted locations. Completion papers for the Wells are not being processed and allowables have not been assigned because the penetration points were off-lease, and in violation of Rule 86 because a portion of the horizontal drainhole, as defined by Rule 86, would not be on the well's lease. As a result, Devon requested hearings for exceptions to Rule 86(d)(4).

Each of the Wells is cased and cemented, with top of cement behind the casing above the top of the Barnett Shale formation. The penetration point, as defined by Rule 86, is off the subject lease.

If the penetration point of these wells is not permitted to be off lease, the wells would have to be plugged and abandoned and redrilled with the penetration point on the same lease as the perforation. This would double the cost of drilling these wells, thus causing economic waste. In the case of the Bedinger-South Well No. 1H, additional Barnett Shale reserves can be produced from the additional 300 feet of legal section of drainhole attributable to the off-lease penetration point. This additional lateral length equates to the approximately 237 MMCF of gas which would not be recovered if the penetration point were required to be on-lease.

between Rule 86 and the existing field rules for the field.

<sup>&</sup>lt;sup>1</sup> When filling out Form W-1, some operators have recited uppermost and lowermost perforations of a wellbore in the section of the Form which requests penetration point and terminus. E-mail communications between Commission staff and another operator verify this practice as acceptable. Apparently, numerous drilling permits in this field have been approved with off-lease penetration points. A hearing is pending to consider amendments to the field rules for the Newark, East (Barnett Shale) Field to clarify discrepancies

Devon requests that the requested exceptions be granted to allow the wells to produce. The perforations are legally permitted distances to lease lines pursuant to the special field rules for the Newark, East (Barnett Shale) Field. Devon requests that the horizontal drainhole displacement for the subject well be determined based on the distance between the perforations and not on the distance from penetration point to terminus. Under Rule 86 Devon would be able to assign additional acreage to the well for proration purposes.

Devon is the surface owner of the tract on which the surface locations for the Bedinger-South Well No. 1H is located. Devon has a Receipt and Release of Damages agreement from the owner of the tract on which the surface location for the Davis No. 9H and 10H Wells are located. For all the Wells, Devon is also the lessee of the oil and gas leases covering the mineral interest in the tract on which the surface location and penetration point are located. Devon 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 for the Wells. Accordingly, it does not appear that Devon is attempting to circumvent Commission rules regarding spacing and assignment of acreage in the requested exception.

## 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. Devon was granted a regular drilling permit for the Bedinger- South Well No. 1H on April 27, 2006, with a surface location off-lease.
  - a. The locations for the penetration point and terminus indicated on the Form W-1 were actually the proposed uppermost and lowermost perforations in the well.

- b. The actual penetration point of the well, as defined by Rule 86, is outside the Bedinger-South Lease.
- c. Commission staff had previously accepted Form W-1 applications for wells in this field with the well's perforations indicated as penetration point and terminus.
- d. The uppermost and lowermost perforations in the well are at legal distances at least 330 feet from any lease line.
- 5. The Bedinger-South Well No. 1H is drilled to a total depth of 9,175 feet (MD) and is cased and cemented, with top of cement behind the casing at 4,210 feet (MD). The penetration point of the Barnett Shale is 6,259 feet (MD). The perforations are from 6,960 feet to 9,062 feet (MD).
- 6. Allowing the penetration point for the Bedinger-South Well No. 1H to be off lease will result in the recovery of approximately 237 MMCF of gas which would otherwise not be recovered.
- 7. The horizontal drainhole displacement for the Bedinger-South Well No. 1H shall be the distance between the perforations, which is 2,102 feet.
- 8. Devon is the owner of the surface of the tract on which the surface location of the Bedinger-South Well No. 1H is located. Devon 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 Bedinger-South No. 1H are located. Devon is the lessee of oil and gas leases covering all mineral interests in the tracts within 330 feet of the Bedinger-South No. 1H from its penetration point off-lease to its terminus.
- 9. Devon was granted a regular drilling permit for the Day Well No. 9H on September 28, 2007, with a surface location off-lease.
  - a. The locations for the penetration point and terminus indicated on the Form W-1 were actually the proposed uppermost and lowermost perforations in the well.
  - b. The actual penetration point of the well, as defined by Rule 86, is outside the Day Lease.

- c. Commission staff had previously accepted Form W-1 applications for wells in this field with the well's perforations indicated as penetration point and terminus.
- d. The uppermost and lowermost perforations in the well are at legal distances at least 330 feet from any lease line.
- 10. Completion papers for the Day Well No. 9H have not been processed and an allowable has not been assigned because the penetration point was off-lease, and in violation of Rule 86 because a portion of the horizontal drainhole, as defined by Rule 86, would not be on the well's pooled unit.
- 11. The Day Lease Well No. 9H is drilled to a total depth of 10,118 feet (MD) and is cased and cemented, with top of cement behind the casing at 1,545 feet (MD). The penetration point of the Barnett Shale is 7,089 feet (MD). The perforations are from 8,040 feet to 10,044 feet (MD).
- 12. Allowing the penetration point for the Day Lease Well No. 9H to be off lease will avoid the unnecessary cost of redrilling the well.
- 13. The horizontal drainhole displacement for the Day Lease Well No. 9H shall be the distance between the perforations, which is 2,004 feet.
- 14. Devon has an agreement with the surface owner of the tract on which the surface location of the Day Lease Well No. 9H is located. Devon 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 Day Lease No. 9H are located. Devon is the lessee of oil and gas leases covering all mineral interests in the tracts within 330 feet of the Day Lease No. 9H from its penetration point off-lease to its terminus.
- 15. Devon was granted a regular drilling permit for the Day Well No. 10H on September 4, 2007, with a surface location off-lease.
  - a. The locations for the penetration point and terminus indicated on the Form W-1 were actually the proposed uppermost and lowermost perforations in the well.

- b. The actual penetration point of the well, as defined by Rule 86, is outside the Day Lease.
- c. Commission staff had previously accepted Form W-1 applications for wells in this field with the well's perforations indicated as penetration point and terminus.
- d. The uppermost and lowermost perforations in the well are at legal distances at least 330 feet from any lease line.
- 16. Completion papers for the Day Lease Well No. 10H have not been processed and an allowable has not been assigned because the penetration point was off-lease, and in violation of Rule 86 because a portion of the horizontal drainhole, as defined by Rule 86, would not be on the well's pooled unit.
- 17. The Day Lease Well No. 10H was drilled to a total depth of 9,564 feet (MD) and is cased and cemented, with top of cement behind the casing at 1,682 feet (MD). The penetration point of the Barnett Shale is 7,063 feet (MD). The perforations are from 7,485 feet to 9,489 feet (MD).
- 18. Allowing the penetration point for the Day Lease Well No. 10H to be off lease will avoid the unnecessary expense of redrilling the well.
- 19. The horizontal drainhole displacement for the Day Lease Well No. 10H shall be the distance between the perforations, which is 2,004 feet.
- 20. Devon has an agreement with the surface owner of the tract on which the surface location of the Day Lease Well No. 10H is located. Devon 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 Day Lease No. 10H are located. Devon is the lessee of oil and gas leases covering all mineral interests in the tracts within 330 feet of the Day Lease No. 10H from its penetration point off-lease to its terminus.

- 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 exceptions are not intended to circumvent Commission rules regarding spacing and assignment of acreage.
- 4. Approval of the requested exceptions to Rule 86(d)(4) will prevent waste and will not harm correlative rights.

### **EXAMINERS' RECOMMENDATION**

The examiners recommend that the requested exceptions to Rule 86(d)(4) be approved for the following wells to allow the penetration point, as defined by Rule 86, to be off-lease:

Bedinger-South Well No. 1H Day Well No. 9H Day Well No. 10H

Respectfully submitted:

Donna K. Chandler Technical Examiner