

OIL AND GAS DOCKET NO. 09-0256405

THE APPLICATION OF ENCANA OIL & GAS (USA) INC. FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS PYRAMID ACRES UNIT 4 WELL NO. 101-H, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

HEARD BY: Donna K. Chandler, Technical Examiner

HEARING DATE: May 6, 2008

APPEARANCES:

Flip Whitworth
Rick Johnston

REPRESENTING:

EnCana Oil & Gas (USA), Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

EnCana Oil & Gas (USA), Inc. requests an exception to Rule 86(d)(4) for its Pyramid Acres Unit 4 Well No. 101-H. An exception is necessary because the penetration point, as defined by Rule 86, is not on the pooled unit for the well. EnCana further requests that all accrued overproduction for the well be canceled.

This application was unopposed and the examiner recommends 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.

Pyramid Acres Unit 4 Well No. 101-H

EnCana was granted a regular drilling permit for the Pyramid Acres Unit 4 Well No. 101-H on September 19, 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. The locations for the penetration point and terminus on Form W-1 were actually the proposed uppermost and lowermost perforations in the well. EnCana had been advised by Commission staff that this was appropriate.¹ The actual penetration point as defined by Rule 86 was outside the Pyramid Acres Unit 4.

On March 19, 2007, EnCana filed completion papers for the well. The as-drilled plat filed with the completion papers 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 the well are at legal distances, being more than 330 feet from any lease line. On July 21, 2007, Commission staff notified EnCana that completion papers for the well could not be processed and an allowable could not be assigned because the penetration

¹ 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 EnCana verify this practice as acceptable. Apparently, numerous drilling permits in this field have been approved with off-lease penetration points.

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. EnCana then requested a hearing for exception to Rule 86(d)(4).

The subject well is drilled to a total depth of 10,118 feet (MD) and is cased and cemented, with top of cement behind the casing at 6,050 feet (MD). The penetration point of the Barnett Shale is 6,389 feet (MD). The perforations are from 7,212 feet to 10,007 feet (MD). The uppermost perforation is 379 feet from the nearest lease line and the lowermost perforation is also 440 feet from the nearest lease line. The penetration point, as defined by Rule 86, is approximately 379 feet off the subject 264 acre pooled unit.

By allowing the penetration point to be off lease, additional Barnett Shale reserves can be produced. It typically takes 400-600 feet to make the "turn" of the wellbore from the top of the Barnett Shale until the drainhole is horizontal. If the penetration point must be on-lease, this 400-600 feet of drainhole could not be produced because operators typically do not elect to perforate in the Barnett Shale until the well is horizontal. This additional drainhole equates to approximately 180 MMCF of gas which would not be recovered if the penetration point were required to be on-lease.

EnCana has an agreement with the surface owner of the tract on which the surface location for the well is located. EnCana is also the lessee of the oil and gas leases covering all mineral interest in the tract on which the surface location is located. EnCana 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 on the Pyramid Acres Unit 4.

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. EnCana was granted a regular drilling permit for the Pyramid Acres Unit 4 Well No. 101-H on September 19, 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 Pyramid Acres Unit 4 pooled unit.
 - 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, being more than 330 feet from any lease line.
5. On July 21, 2007, Commission staff notified EnCana that completion papers for the well could not be processed and an allowable could not be 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.
 6. The subject well is drilled to a total depth of 10,118 feet (MD) and is cased and cemented, with top of cement behind the casing at 6,050 feet (MD). The penetration point of the Barnett Shale is 6,389 feet (MD). The perforations are from 7,212 feet to 10,007 feet (MD).
 7. Allowing the penetration point for the Pyramid Acres Unit 4 Well No. 101-H to be off lease will result in the recovery of approximately 180 MMCF of gas which would otherwise not be recovered.
 8. The horizontal drainhole displacement for the Pyramid Acres Unit 4 Well No. 101-H shall be the distance between the perforations, which is 2,795 feet.
 9. EnCana is the lessee of a surface lease from the surface owner of the tract on which the surface location of the Pyramid Acres Unit 4 Well No. 101-H is located. EnCana 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 Pyramid Acres Unit 4 Well No. 101-H are located.

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.

EXAMINER'S RECOMMENDATION

The examiner recommends that the requested exception to Rule 86(d)(4) be approved for the Pyramid Acres Unit 4 Well No. 101-H to allow the penetration point, as defined by Rule 86, to be off-lease.

Respectfully submitted,

Donna K. Chandler
Technical Examiner