

OIL AND GAS DOCKET NO. 09-0254255

THE APPLICATION OF ENCANA OIL & GAS (USA) INC. FOR EXCEPTION TO RULE 86 (D)(4)E 11 FOR ITS O. P. LEONARD INVESTMENTS UNIT 2, WELL NO. 2-H, NEWARK, EAST (BARNETT SHALE) FIELD, PARKER COUNTY, TEXAS

HEARD BY: Thomas H. Richter, Technical Examiner
Mark J. Helmueller, Hearings Examiner

REVIEWED BY: Donna K. Chandler, Technical Examiner

HEARING DATE: November 29, 2007

APPEARANCES:

Flip Whitworth	EnCana Oil & Gas (USA), Inc.
Rick Johnston	
John Harris	
Sharon Cook	
Chuck Traxler	
David Gross	XTO Energy
Brian Sullivan	
Sandy Buch	Devon Energy Production Co.
Mary Patton	Range Production Co.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

EnCana Oil & Gas (USA), Inc. requests an exception to Rule 86(d)(4) for its O. P. Leonard Investments Unit 2 Well No. 2-H. EnCana further requests that all accrued overproduction for the well be canceled.

This application was unopposed 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.

O.P. Leonard Investments Unit 2 Well No. 2H

EnCana was granted a regular drilling permit for the O. P Leonard Investments Unit 2 No. 2H on July 17, 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 O. P. Leonard Investments Unit 2. After the well was drilled, EnCana filed an amended W-1 on April 11, 2007. On this amended W-1, the surface location was slightly amended and the actual penetration point (as defined by Rule 86) was indicated on the plat to be off-lease and on the same tract as the surface location. On the amended Form W-1, EnCana noted the locations for the actual uppermost and lowermost perforations in the portion of the form which requires penetration point/terminus information. Both the uppermost and lowermost perforations are at legal distances, more than 330 feet from the nearest lease line. The well was granted an amended regular permit.

On May 2, 2007, EnCana filed completion papers for the well. The as-drilled plat, which had already been filed with the amended Form-W-1, indicated that 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 October 1, 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. EnCana then requested a hearing for exception to Rule 86(d)(4).

The subject well is drilled to a total depth of 10,031 feet (MD) and is cased and cemented, with top of cement behind the casing at 4,815 feet (MD). The penetration point of the Barnett Shale is 6,557 feet (MD). The perforations are from 7,301 feet to 9,944 feet (MD). This makes the uppermost perforation 333 feet from the nearest lease line and the lowermost perforation is 390 feet from the nearest lease line. The penetration point, as defined by Rule 86, is 72 feet off the subject lease.

By allowing the penetration point to be off lease, additional Barnett Shale reserves can be produced from a legal section of drainhole, usually about 400 feet in length. The 400 feet is the distance needed to make a portion of the "turn" of the wellbore from the top of the Barnett Shale until the drainhole is horizontal. Operators typically do not elect to perforate in the Barnett Shale until the well is horizontal. This 400 feet equates to approximately 104 MMCF of gas which would not be recovered if the penetration point were required to be on-lease.

EnCana 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. EnCana requests that the horizontal drainhole displacement for the subject well be determined based on the distance between the perforations, which is 2,643 feet, and not on the distance from penetration point to terminus. Under Rule 86 and based on this 2,643 feet, EnCana would be able to assign

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.

an additional 160 acres to the well for proration purposes. However, the O. P. Leonard Investments Unit 2 lease is only 160 acres and EnCana would not benefit in additional acreage assignment by using penetration point to terminus, as allowed determined by Rule 86, instead of perforation to perforation.

EnCana is the lessee of a surface lease from 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. EnCana is also 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. Accordingly, it does not appear that EnCana is attempting to circumvent Commission rules regarding spacing and assignment of acreage in the requested exception.

It is further noted that a hearing is scheduled for January 9, 2008, to consider amendments to the field rules for the Newark, East (Barnett Shale) Field, to clarify discrepancies between Rule 86 and the existing field rules for the field.

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 O. P. Leonard Investments Unit 2 Well No. 2H on July 17, 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 O. P. Leonard Investments Unit 2.

- 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. After the well was drilled, EnCana filed an amended W-1 on April 11, 2007 and was granted an amended regular drilling permits.
 - a. On the amended W-1 for the well, the surface location was slightly amended and the actual penetration point (as defined by Rule 86) was indicated on the plat to be off-lease and on the same tract as the surface location.
 - b. On the amended Form W-1, EnCana noted the locations for the actual uppermost and lowermost perforations in the portion of the form which requires penetration point/terminus information.
 - c. Both the uppermost and lowermost perforations are at legal distances, more than 330 feet from the nearest lease line.
6. On October 1, 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.
7. The subject well is drilled to a total depth of 10,116 feet (MD) and is cased and cemented, with top of cement behind the casing at 4,815 feet (MD). The penetration point of the Barnett Shale is 6,557 feet (MD). The perforations are from 7,301 feet to 9,934 feet (MD).
8. Allowing the penetration point for the O. P. Leonard Investments Unit 2 Well No. 2H to be off lease will result in the recovery of approximately 104 MMCF of gas which would otherwise not be recovered.
9. The horizontal drainhole displacement for the O. P. Leonard Investments Unit 2 Well No. 2H shall be the distance between the perforations, which is 2,730 feet.
10. EnCana is the lessee of a surface lease from the surface owner of the tract on which the surface location of the O. P. Leonard Investments Unit 2 Well No. 2H 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 subject well are located. EnCana 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.

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 O. P. Leonard Investments Unit 2 Well No. 2H to allow the penetration point, as defined by Rule 86, to be off-lease.

Respectfully submitted,

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