

OIL AND GAS DOCKET NO. 09-0257876

APPLICATION OF ENDEAVOR ENERGY RESOURCES LP FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS WINDJAMMER UNIT, WELL NO. 1H, NEWARK, EAST (BARNETT SHALE) FIELD, DENTON COUNTY, TEXAS

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APPLICATION OF ENDEAVOR ENERGY RESOURCES LP FOR EXCEPTION TO RULE 86 (D)(4) FOR ITS WESTMINSTER UNIT, WELL NO. 1H, NEWARK, EAST (BARNETT SHALE) FIELD, DENTON COUNTY, TEXAS

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

HEARING DATE: August 5, 2008

APPEARANCES:

REPRESENTING:

Tim George
David Cotner

Endeavor Energy Resources LP

EXAMINER'S REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Endeavor Energy Resources LP requests an exception to Rule 86(d)(4) for the following wells completed in the Newark, East (Barnett Shale) Field:

Windjammer Unit, Well No. 1H; and
Westminster Unit, Well No. 1H;

These 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 pooled unit for the well.

These applications were unopposed and the examiner recommends 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:

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.

Endeavor was granted a regular drilling permit for the Wells 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 each of the Wells. 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, Endeavor understood this to be the appropriate information to be provided on the Form W-1.¹ The actual penetration point as defined by Rule 86 was outside the pooled unit 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. 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 pooled unit. As a result, Endeavor requested hearings for exceptions to Rule 86(d)(4).

Each of the Wells is cased and cemented, with the top of cement behind the casing 1,500 feet above the top of the Barnett Shale formation. The penetration point, as defined by Rule 86, is off the subject lease.

Endeavor 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. Endeavor 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, Endeavor would be able to assign additional acreage to the well for proration purposes.

The Wells are drilled on pooled units in which the surface use is a housing subdivision, making each unit unsuitable as a drilling location. Endeavor is the

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 another operator verify this practice as acceptable. Apparently, numerous drilling permits in this field have been approved with off-lease penetration points. An order was entered on July 29, 2008 to amend the field rules for the Newark, East (Barnett Shale) Field to clarify discrepancies between Rule 86 and the existing field rules for the field. The last day for the parties to file a Motion For Re-Hearing is August 23, 2008.

lessee of a surface and mineral lease from the owner of the tract on which the surface location and the penetration point of each well is located. By locating the surface location off-lease, Endeavor is able to develop the minerals under the units while accommodating the development of the surface for its highest and best use. Also, by locating the wellheads for the Wells on the same surface tract, Endeavor is able to minimize the impact on land use of developing the minerals through multiple wellbores. Accordingly, it does not appear that Endeavor 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. Endeavor was granted a regular drilling permit for the Windjammer Unit, Well No. 1H on September 15, 2004, 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 Windjammer 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 at least 330 feet from any lease line.

5. The Windjammer Unit, Well No. 1H is cased and cemented, with the top of cement behind the casing 1,500 feet above the top of the Barnett Shale. The penetration point of the Barnett Shale is 240 feet outside of the unit boundary. The top and bottom perforation are 330 feet and 380 feet inside the unit boundary, respectively.
6. Endeavor is the lessee of a surface and mineral lease from the owner of the tract on which the surface location and the penetration point of the Windjammer Unit, Well No. 1H is located.
7. The surface use of the Windjammer Unit is a housing subdivision. An off-lease drilling location is necessary to develop the minerals under the Unit.
8. Endeavor was granted a regular drilling permit for the Westminster Unit, Well No. 1H on September 15, 2004, 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 Westminster 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 at least 330 feet from any lease line.
9. The Westminster Unit, Well No. 1H is cased and cemented, with the top of cement behind the casing 1,500 feet above the top of the Barnett Shale. The penetration point of the Barnett Shale is 535 feet outside of the unit boundary. The top and bottom perforation are 345 feet and 385 feet inside the unit boundary, respectively.

10. Endeavor is the lessee of a surface and mineral lease from the owner of the tract on which the surface location and the penetration point of the Westminster Unit, Well No. 1H is located.
11. The surface use of the Westminster Unit is a housing subdivision. An off-lease drilling location is necessary to develop the minerals under the Unit.

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 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 examiner recommends that the requested exceptions to Rule 86(d)(4) be approved to allow the penetration point, as defined by Rule 86, to be off-lease for the Windjammer Unit, Well No. 1H, and the Westminster Unit, Well No. 1H.

Respectfully submitted:

Richard D. Atkins, P.E.
Technical Examiner