



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 06-0282433

THE APPLICATION OF VALENCE OPERATING COMPANY TO AMEND FIELD RULE NO. 2 FOR THE WARE (COTTON VALLEY) FIELD, HARRISON COUNTY, TEXAS

HEARD BY: Andres J. Trevino, P.E. - Technical Examiner
Laura Miles-Valdez - Legal Examiner

ER&R PREPARED BY: Richard D. Atkins, P.E. - Technical Examiner

HEARING DATE: June 4, 2013

APPEARANCES: REPRESENTING:

APPLICANT:

Rick Johnston

Valence Operating Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Ware (Cotton Valley) Field were adopted in Final Order No. 6-98,117, effective August 3, 1992, as amended. The Field Rules are summarized as follows:

1. Designation of the field as the correlative interval from 8,685 feet to 10,080 feet as shown on the log of the Valence Operating Company - Whaley 1 Lease, Well No. 1 (API No. 42-203-31180);
2. 467'-933' well spacing;
3. 160 acre gas units with optional 40 acre density;
4. Allocation based on 95% acreage and 5% deliverability with AOF status.

Valence Operating Company ("Valence") requests that Field Rule No. 2 be amended, as shown below:

2. 330'-660' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and special provisions for "take points", a 50' "box" rule and "off-lease" penetration point for horizontal drainhole wells.

The application is unopposed and the examiners recommend that Field Rule No. 2 for the Ware (Cotton Valley) Field be amended, as proposed by Valence.

DISCUSSION OF EVIDENCE

The Ware (Cotton Valley) Field was discovered in June 1993 at an average depth of 9,800 feet. The field is classified as associated-100% AOF and there are 45 producing gas wells, no oil wells and five operators carried on the proration schedules. The field operates under Field Rules that provide for 467'-933' well spacing and 160 acre gas units with optional 40 acre density. Cumulative production from the field through March 2013 is 27.3 BCFG and 222.3 MBO.

Valence is developing the field with horizontal drainhole wells and requests that Field Rule No. 2 be amended to promote the efficient and effective development of the remaining hydrocarbons. Valence proposes 330'-660' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and special provisions for "take points", a 50' "box" rule and "off-lease" penetration point for horizontal drainhole wells. Valence argues that the proposed no between well spacing is necessary to allow the drilling of horizontal drainhole wells, which may have to be placed very near vertical wells in some cases. Similar Field Rules have been adopted in other tight reservoirs, including the Eagle Ford, Wolfcamp, Bone Spring, Cotton Valley and Barnett Shale formations.

Valence requests that a Field Rule be adopted which includes language relevant to the measurement of distances to lease lines for horizontal drainhole wells. Valence's proposed rule specifies that, for purposes of lease line spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation in a horizontal well that is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well. For purposes of assignment of additional acreage pursuant to Statewide Rule 86, the distance between the first and last take points in a horizontal drainhole well should be used.

Valence also proposes a 50' "box rule" for horizontal drainhole wells that would allow drainholes to deviate 50 feet from either side of their permitted track without the necessity of obtaining a Statewide Rule 37 exception. As drilled wells for which all points are located within the "box" would be considered in compliance with their drilling permits.

In some cases, it is beneficial to penetrate the reservoir off lease, while still having “take points” no closer to lease lines than allowed under the field rules. Valence requests that Field Rules for the subject field provide for an “off-lease” penetration point. Statewide Rule 86 requires that the penetration point of a horizontal drainhole be on the lease. In this field, a well generally requires approximately 600 feet of horizontal displacement to make the 90 degree turn from vertical to horizontal. If the penetration point is required to be on the lease, then the first point of production would be about 600 feet from the lease line. The proposed rule will allow approximately 300 feet of additional producing drainhole, which will result in the recovery of additional reserves. The Commission has adopted similar rules allowing offsite penetration points in other fields, after the operator has given notice to the mineral owners of the off-lease tract on which the penetration point is to be located and received no protest.

Valence also requests that the allocation formula remain suspended, as there is a 100% market demand for all of the gas produced from the field.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of the hearing and no protests were received.
2. The Ware (Cotton Valley) Field was discovered in June 1993 at an average depth of 9,800 feet.
 - a. The field is classified as associated-100% AOF and there are 45 producing gas wells, no oil wells and five operators carried on the proration schedules.
 - b. The field operates under Field Rules that provide for 467'-933' well spacing and 160 acre gas units with optional 40 acre density.
 - c. Valence Operating Company is developing the field with horizontal drainhole wells and requests that Field Rule No. 2 be amended to promote the efficient and effective development of the remaining hydrocarbons.
3. The proposed 330'-660' well spacing with no minimum between well spacing between vertical and horizontal drainhole wells and special provisions for “take points”, a 50' “box” rule and “off-lease” penetration point for horizontal drainhole wells is appropriate for the Ware (Cotton Valley) Field.
4. A spacing rule which utilizes “take-points” in a horizontal well for determination of distances to lease lines will prevent waste and will not harm correlative rights.

- a. A take-point in a horizontal well in this field may be a perforation in a horizontal well that is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased portion of the wellbore.
 - b. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
 - c. For purposes of assignment of additional acreage pursuant to Statewide Rule 86, the distance between the first and last take points in a horizontal drainhole well should be used.
5. The proposed no between well spacing is necessary to allow the drilling of horizontal drainhole wells, which may have to be placed very near vertical wells in some cases.
 6. The proposed 50' "box rule" is necessary to allow operators reasonable minor deviations from the wellbore track that has been permitted.
 7. Allowing an "off-lease" penetration point will result in maximum producing drainhole length, thereby increasing ultimate recovery from horizontal drainhole wells. To protect correlative rights, prior notice and opportunity to object should be given to the mineral owners of "off-lease" surface locations.
 8. Similar Field Rules have been adopted in other tight reservoirs, including the Eagle Ford, Wolfcamp, Bone Spring, Cotton Valley and Barnett Shale formations.
 9. Continued suspension of the allocation formula is appropriate, as there is a 100% market demand for all of the gas produced from the field.

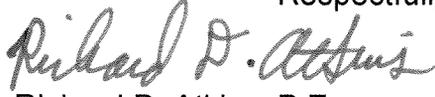
CONCLUSIONS OF LAW

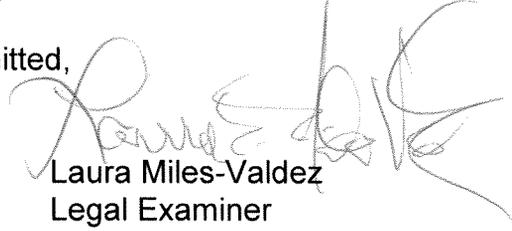
1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Amending Field Rule No. 2 for the Ware (Cotton Valley) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission amend Field Rule No. 2 for the Ware (Cotton Valley) Field, as proposed by Valence Operating Company.

Respectfully submitted,


Richard D. Atkins, P.E.
Technical Examiner


Laura Miles-Valdez
Legal Examiner