
**THE APPLICATION OF ROFF OPERATING COMPANY, LLC. TO AMEND RULES FOR
THE BREEDLOVE FIELD, MARTIN COUNTY, TEXAS**

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: August 29, 2003

Hearing held: September 23, 2003

Appearances

Andy Taylor
John R. Polleys

Representing
Roff Operating Company, LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules for the Breedlove Field, adopted November 20, 1978, under Docket No. 4-70,471, as amended, are summarized as follows:

1. 660'-1320' well spacing;
2. 80 acre oil proration units with 40 acre tolerance for the last well on a lease and a maximum diagonal of 3200'; and
3. Allocation based 75% on acreage and 25% per well.

Roff Operating Company ("Roff") is requesting the following amended field rules. The allocation formula will remain unchanged.

1. Designated interval from 11,944' to 12,218' as shown on the log of the Breedlove Lease Well No. B-29;
2. 467'-660' well spacing;
3. 80 acre oil proration units with 40 acre optional units.

DISCUSSION OF THE EVIDENCE

The Breedlove Field was discovered in 1951. Field rules covering the Devonian formation were adopted in 1953. Roff has 39 wells of the 40 wells and the only other active well is operated by Prime Operating Company. Thirty of the wells were drilled in the 1950's and their average ultimate recovery

is expected to be 843,000 BO. Five wells were drilled during the early 1990's and Roff has added another four during the last year and a half. The expected ultimate recovery of these newer wells is 325,000 BO.

The producing interval varies from well to well and can occur anywhere within the Devonian section. The top of the Devonian is at 11,944' in Roff's Breedlove Lease Well No. B-29, and the base is at 12,218'. The Devonian is a limestone section with production from dolomitized intervals. Fractures and a water drive also contribute to production. The field is located on a long anticline to the west of a fault that trends northeast-southwest. The applicant believes that the productive dolomite lenses are better connected in the older, more-developed part of the reservoir. Wells in this northern end of the field are capable of draining 80 acres.

The new wells in the southern part of the field, were drilled on satellite features identified by 3d seismic. These wells apparently found reserves undrained by previous wells. For example, Roff's Breedlove B-43 was completed in May, 2003, flowing at 250 BOPD, without water. The Breedlove B-27 has been producing since 1990, only 900' away, and has cumulative production of 128,000 BO. The Breedlove B-27 was pumping at a daily rate of only 14 BO and 100 BW before being shut-in due to collapsed casing.

Roff completed its Breedlove B-37R in June, 2002, flowing 207 BOPD without water. This well has produced 126,000 BO through August, 2003. The B-37R found 130' of porosity even though it is less than 1200' from Roff's Breedlove B-26 which had only 11' of porosity at the top of the Devonian. The Breedlove B-26 has produced 450,000 BO since being completed in 1990.

Cumulative field production is almost 28 million barrels of oil. Roff believes that new infill wells on 40-acre density can produce an average of 325,000 BO each, though actual recovery may be quite variable. Roff has found locations for ten new wells, all of which would require exceptions to Statewide Rules 37 and/or 38 under the existing field rules. Well spacing of 467' from lease lines is standard for 40-acre optional units. Between-well spacing of 660' will facilitate infill drilling between existing wells.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Breedlove Field on September 11, 2003.
2. The Breedlove Field was discovered in 1951, and has forty active wells, all but one operated by Roff Operating Company("Roff").
3. The productive intervals in this field are found throughout the Devonian section.
4. The top of the Devonian formation is at 11,944' in Roff's Breedlove Lease Well No. B-29, and the base is at 12, 218'.

5. The average ultimate recovery from wells drilled during the 1950's is estimated to be 843,000 BO.
6. The expected average ultimate recovery of nine wells drilled during the last 10-12 years is 325,000 BO.
7. New infill wells on 40-acre density can produce an average of 325,000 of incremental oil, though recovery will be variable.
8. Recent wells drilled on satellite features to the main anticline found reserves apparently undrained by previous wells.
 - a. Roff's Breedlove B-43 flowed 250 BOPD in May, 2003, only 900' away from a 1990 well that has already produced 128,000 BO.
 - b. Roff's Breedlove B-37R in June, 2002, flowed at a rate of 207 BOPD in June, 2002, only 1200' from a 1990 well that already has cumulative production of 450,000 BO.
 - c. The Breedlove B-37R produced 126,000 BO in just over a year.
9. Lease-line spacing of 467' is standard for 40-acre optional units and between-well spacing of 660' will facilitate infill drilling.
10. This field has a two-factor allocation formula, based 75% on acreage and 25% per well.

CONCLUSIONS OF LAW

1. Proper notice was given as required by statute.
2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. Adoption of a designated interval and amending the spacing and density rule to allow optional 40-acre units, will prevent waste, protect correlative rights within the field, and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the field rules for the Breedlove Field be amended to adopt a designated interval, to decrease the well spacing to 467-660' and to provide for 40-acre optional units, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: October 7, 2003