



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7B-0288126

**APPLICATION OF KILLION WELL SERVICE TO ADOPT PERMANENT FIELD RULES
FOR THE LEE RAY (CADDO) FIELD, STEPHENS COUNTY, TEXAS**

HEARD BY: Paul Dubois – Technical Examiner
Michael Crnich – Hearings Examiner

DATE OF HEARING: April 28, 2014

APPEARANCES:

Bill Spencer
Jim Clark

REPRESENTING:

Killion Well Service

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Killion Well Service (Killion) requests that field rules be adopted permanently for the Lee Ray (Caddo) Field in Stephens County, Texas. Killion requests the following field rules be adopted for the field:

- Establish a correlative interval from 3,290 feet to 3,483 feet;
- 330 feet lease line spacing and 933 feet between well spacing, and a suite of horizontal well spacing rules;
- 80 acre standard drilling and proration units and 40 acre optional units
- Two-factor allocation formulae for oil and gas wells; and
- Provisions for stacked lateral wells.

The application was not protested. The examiners recommend that the field rules for correlative interval, 330 feet lease line spacing and 933 feet between well spacing, and 80 acre standard units with 40 acre optional units be adopted. The examiners do not recommend that the proposed field rules for horizontal well rules, two factor allocation

formulae, and stacked lateral wells be adopted; the Applicant did not make a case for the applicability or necessity of these rule provisions. The Applicant does not consider this recommendation to be adverse.

DISCUSSION OF THE EVIDENCE

The discovery date for the Lee Ray (Caddo) Field was is not known, but production dates back to 1947. The wells in the field were plugged and abandoned in the 1950s. The field has been revitalized since the late 1990s. The current oil proration schedule carries three oil wells in the field. The current gas proration schedule carries one injection well and no gas wells. Killian is the only operator in the field. The field is currently under County Regular Rules. The productive interval is between 3,001 and 5,000 feet, and therefore the County Regular spacing rules of 330-foot lease line and 933 feet between well spacing applies, and 20 acres are required for drilling and proration units. Killian plans on continued revitalization of the field, and to that end it believes that the proposed field rules will prevent waste, protect correlative rights, and promote the orderly development of the field.

The well log of the Cumming Company, Inc. Lee Ray No. 1 well (API No. 42-293-35729)¹ defines the Lee Ray (Caddo) Field between the correlative interval of 3,290 feet to 3,483 feet. The Lee Ray (Caddo) has well developed porosity only in the top 20 feet of the correlative interval. The overall correlative interval is underlain by the productive Lake Sand Formation, and it is overlain by a thick shale sequence.

The Caddo formation in the area is productive. However, it is not possible to accurately determine how much oil and gas have been produced from the formation; many Caddo wells were assigned to the Stephens County Regular Field. Additionally, some wells were likely assigned to the "Lee Ray" Field, and not the formal name "Lee Ray (Caddo)" Field.

In November 1998 The Cumming Company completed the Lee Ray No. 1 well in the Lee Ray (Caddo) Field at a depth of 3,294 to 3,300 feet. On initial potential testing, the gas well produced 438 MCF gas. In October 1999 the well was reclassified as an oil well with a test of 14 bbl oil, 20 MCF gas, and 65 bbl water. The well continues to produce about 250 bbl oil and very little gas per month.

Killian estimates the field contains about 22 feet of pay with an average porosity of 11.8 percent. Water saturation is about 18 percent. Killian estimates the estimated ultimate recovery to be about 83,000 std bbl. This estimate is based on a 1.25 formation volume factor and a 10 percent recovery factor, and the estimate is consistent with other historical wells in the field. Killian estimates that the Lee Ray No. 1 well drains 62.6 acres. Further, Killian estimates that an average well on its Hamilton Lease in the Lee Ray

¹ This well is now operated by Killian.

(Caddo) Field drains 35.1 acres. These acreage estimates support Killians request for 80 acre units with 40 acre options.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the hearing.
2. The hearing was not protested.
3. The discovery date for the Lee Ray (Caddo) Field was is not known, but production dates back to 1947 and many wells in the field were plugged and abandoned in the 1950s. The field has been revitalized since the late 1990s.
4. The current proration schedules carry three oil wells; one injection well is carried on the gas schedule. Killion is the only operator in the field. The field is currently under County Regular Rules.
5. The well log of the Cumming Company, Inc. Lee Ray No. 1 well (API No. 42-293-35729) defines the Lee Ray (Caddo) Field between the correlative interval of 3,290 feet to 3,483 feet.
6. The Lee Ray (Caddo) has well developed porosity only in the top 20 feet of the correlative interval.
7. Killian's drainage acreage estimates are reasonable and support its request for 80 acre units with 40 acre optional units.
8. The field has not been developed with any horizontal wells, and the Applicant did not indicate that horizontal wells were planned or contemplated for the future.
9. The correlative interval is 193 feet thick and only the top 22 feet is productive; a two-factor allocation formula is not required under the Natural Resources Code.
10. A 193-foot thick correlative interval does not support the use of stacked lateral wells.
11. Adopting as permanent the proposed field rules for correlative interval, 330 feet lease line spacing and 933 feet between well spacing, and 80 acre standard units with 40 acre optional units will reduce waste, protect correlative rights, and promote the orderly development of the field.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. The proposed field rules for correlative interval, 330 feet lease line spacing and 933 feet between well spacing, and 80 acre standard units with 40 acre optional units will reduce waste, protect correlative rights, and promote the orderly development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions of law, the examiners recommend adopting as permanent field rules for the Lee Ray (Caddo) Field, as indicated above.

Respectfully submitted,



Paul Dubois
Technical Examiner



Michael Crnich
Hearings Examiner