

November 9, 1999

OIL AND GAS DOCKET NO. 8A-0222907

THE APPLICATION OF TRAIL MOUNTAIN, INC., FOR FIELD RULES IN THE KINGDOM (CLEAR FORK 7500) FIELD, TERRY COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: October 11, 1999

Hearing held: November 8, 1999

Appearances

	Representing
G. Thane Akins	Trail Mountain, Inc.
John Soule	PennzEnergy Exploration & Production

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Trail Mountain originally sought the following field rules:

1. 660-1320' well spacing;
2. 80-acre optional proration units with maximum diagonal of 3250'; and
3. Allocation based on acreage.

At the request of PennzEnergy, Trail Mountain amended its application and requested 467-933' spacing, with 80-acre standard units and 40-acre optional units. At the examiner's request the applicant added the following designated interval rule:

1. Designated interval from 7300 to 7725 feet as shown on the log of the Trail Mountain Helen Well No. 2.

The examiner suggested that the requested temporary rules, as amended, be made permanent and both operators in the field concurred.

DISCUSSION OF THE EVIDENCE

The Kingdom (Clear Fork 7500) Field was discovered with the completion of Trail Mountain's Christine Lease Well No. 1, in August of 1997. This well was perforated from 7505 to 7560 feet and from 7380 to 7452 feet. The initial potential was 367 BOPD without no gas or water. Cumulative production is 77,000 BO and current production is about 75 BOPD.

The second well in the field, PennzEnergy's Mallet Ranch Well No. 1, was completed in April of 1999. This well produced 4000 BO through July of 1999, and is now producing less than 30 BOPD. Trail Mountain drilled the third well in the field, the Helen No. 2 in September of 1999, and it is producing 200 to 300 BOPD. The Helen No. 2 is selectively perforated between 7302 and 7545 feet. The interval extending from 7300 to 7725 feet as shown on the log of the Helen No. 2 encompasses the productive Clear Fork interval in the subject field.

The field's average porosity is 5%, permeability is 2.6 md and the water saturation is 25%. The average net pay is estimated to be 66 feet. The initial reservoir pressure was 4200 psi. Neither of the Trail Mountain wells produces gas or water. The estimated ultimate recovery from the Christine No. 1 is 316,000 BO, assuming hyperbolic decline; and 237,000 BO, assuming exponential decline. If this well eventually recovers the more optimistic amount, it will drain 98 acres. Based on its current producing rate, PennzEnergy's well will probably drain much less.

Standard spacing for 40-acre optional units is 467-933 feet. The standard tolerance acreage for wells in oil fields with 40-acre optional units is 40 acres for the last well on a lease. Allocation based on acreage will protect correlative rights.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Kingdom (Clear Fork 7500) Field and to all offset operators to the discovery tract on October 21, 1999.
2. The Kingdom (Clear Fork 7500) Field was discovered in August of 1997, with the completion of the Trail Mountain Christine Well No. 1.
3. Trail Mountain drilled its second well, the Helen No. 2, in September of 1999, and it is producing 200 to 300 BOPD.
4. The discovery well has produced 77,000 BO and current production is about 75 BOPD.
5. Field density of 80 acres with 40-acre optional units is appropriate.
 - a. The Christine No. 1 will ultimately produce 316,000 BO, assuming hyperbolic decline.
 - b. Volumetric analysis indicates that there are 316,000 barrels of recoverable oil underneath 98 acres.

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- c. PennzEnergy drilled its Mallet Ranch No. 1 in July of 1999, and it is producing less than 30 BOPD.
 - d. The PennzEnergy well will probably drain less than 40 acres.
- 6. The interval from 7300 to 7725 feet, as shown on the log of Trail Mountain's second well, the Helen No. 2, encompasses all of the productive Clear Fork formation in this field.
 - 7. Well spacing of 467-933 feet is standard for fields with 40-acre optional units.
 - 8. The proposed allocation formula, based on acreage, will protect correlative rights.

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. The recommended field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested field rules for the Kingdom (Clear Fork 7500) Field, as amended at the hearing, be approved on a permanent basis.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: December 7, 1999

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Exhibits

1. Form W-2 for discovery well
2. Land plat
3. Monthly production
4. Graph of decline rate
5. Monthly production from second well
6. Daily production from third well
7. Log of discovery well
8. Log of third well
9. Reservoir data sheet
10. Estimation of EUR
11. Drainage calculations
12. Estimation of EUR for third well
13. Drainage calculations for third well
14. Service list
15. Revised rules as requested