

LINDIL C. FOWLER, JR., GENERAL COUNSEL

LARRY BORELLA, ASST. DIRECTOR

OIL & GAS SECTION

RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

August 26, 1998

OIL AND GAS DOCKET NO. 7B-0220000

THE APPLICATION OF CENTAUR PETROLEUM CORPORATION TO ADOPT TEMPORARY FIELD RULES FOR THE ZACHARY (CANYON SD.) FIELD, HASKELL COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: August 3, 1998 Hearing held: August 26, 1998

Appearances

Earl Burns

Representing

Centaur Petroleum Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Centaur Petroleum is seeking the following rules for the Zachary (Canyon Sd.) Field:

- 1. Designated interval from the 2502 to 2550 feet as shown on the log of the Centaur JBK Well No. 4;
- 2. 330-660' well spacing;
- 3. 20 acre oil proration units with 1500' maximum diagonal and 10-acre tolerance for the last well on a lease; and
- 4. Allocation formula based on acreage.

DISCUSSION OF THE EVIDENCE

In 1996, Centaur re-entered a Burke Royalty well that had been plugged in 1992. Centaur perforated the Hisey No. 1 between 2537 and 2539 feet, and tested a Canyon sand between 2502 and

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2550 feet, at a rate of 48 BOPD, with no water and only a trace of gas. Centaur has since completed four more wells in the field and the cumulative production is now 74,000 BO.

The average porosity of the Canyon sand is 21%, the water saturation equals 48% and the net pay is assumed to be 8 feet. The permeability is relatively good at 90 md. Production is now about 50% water and the reservoir is believed to have a waterdrive. Volumetric calculations indicate that there are about 29,000 barrels of recoverable oil underneath 20 acres.

A material balance equation indicates that the drainage radius of a typical well that is now producing 26 BOPD, will be 533 feet. If wells drain radially, a circle of 20.5 acres will be swept. Well spacing of 330-660 feet is common for 20-acre density. An allocation formula based on acreage will protect correlative rights. The applicant does not plan to drill any more wells unless the price of oil rises.

FINDINGS OF FACT

- 1. Notice of this hearing was mailed by the Commission to all operators in the Zachary (Canyon Sd.) Field and to all offset operators on August 12, 1998.
- 2. The discovery well of the subject field, the Centaur Hisey Lease, Well No. 1, was re-entered in January of 1996 and perforated from 2537 to 2539 feet, in the Canyon sandstone.
- 3. The initial potential of the discovery well was 48 BOPD with no water and only a trace of gas.
- 4. There are now five wells in the subject field, all operated by Centaur, which have produced 74,000 BO.
- 5. The proposed designated interval from 2502 to 2550 feet covers the producing Canyon sandstone.
- 6. Twenty acre density is appropriate for temporary field rules.
 - a. Volumetric calculations, using 30% recovery due to the waterdrive, indicate that there are 29,000 barrels of recoverable oil underneath 20 acres.
 - b. Material balance equations indicate that the wells, which are averaging 26 BOPD, will be able to drain just over 20 acres.
- 7. Well spacing of 330-660 feet is standard for 20-acre density.
- 8. An allocation formula based on acreage will protect correlative rights.

CONCLUSIONS OF LAW

- 1. Proper notice as required by statute was given to all parties entitled to notice.
- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
- 3. Adoption of the requested field rules will protect correlative rights, prevent waste, and promote an 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 Zachary (Canyon Sd.) Field be approved.

Respectfully submitted,

Margaret Allen

Technical Hearings Examiner

Date of Commission Action_____