OIL AND GAS DOCKET NO. 04-0228815

THE APPLICATION OF UNITED OIL & MINERALS, LP, FOR TEMPORARY FIELD RULES IN THE ELLEN, N.W. (9000 SAND) FIELD, BROOKS COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: June 28, 2001 Hearing held: July 26, 2001

Appearances

Dale Miller

Representing United Oil & Minerals

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

United Oil & Minerals is seeking the following temporary field rules for the Ellen, N.W. (9000 Sand) Field:

- Designated interval from 9010 to 9031 feet as shown on the log of the United Oil & Minerals Cage Ranch Lease Well No. 4;
- 2. 1320-2640 foot well spacing;
- 3. 320 acre gas proration units with 10% tolerance and a maximum diagonal of 6000 feet; and
- 4. allocation based on acreage.

DISCUSSION OF THE EVIDENCE

The Ellen, N.W. (9000 Sand) Field was discovered in March of 2001, with the completion of the United Cage Ranch Lease Well No. 4. The discovery well was perforated from 9012 to 9024 in a Frio sandstone that extends from 9010 to 9031. The maximum tested producing rate of this well was 2731 MCF/D, at a bottomhole pressure of 5327 psi.

The net pay is 11 feet, porosity is 23% and the water saturation is 45%. Water is 18% of current liquid production, and United assumed 65% recovery based on a weak water drive. Using these assumptions, there are 1400 MCF of recoverable gas per acre-foot of reservoir and therefor 3.2 BCF of recoverable reserves underneath 320 acres.

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Cumulative production between March 19 and July 18, 2001, is 200 MMCF and 2800 barrels of condensate. The well exhibited a steep decline initially but the production rate has leveled off at about 1450 MCF per day. Assuming an annual decline of 20%, the remaining production of the well will be 2.3 BCF. Based on volumetric analysis, this will drain the recoverable reserves underneath 252 acres.

After 18 months there should be sufficient production history to determine if wells in the subject field will produce as predicted. United plans additional development based on seismic. Well spacing of 1320-2640 feet is standard for 320 acre density, and allocation based on acreage will protect correlative rights.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators in the field and to all offset operators and unleased mineral interest owners to the discovery tract on July 9, 2001.
- 2. The Ellen, N.W. (9000 Sand) Field was discovered in March of 2001, by the completion of the United Oil & Minerals Cage Ranch Well No. 4.
- 3. The discovery well had a maximum initial test rate of 2731 MCF per day, at an initial bottomhole pressure of 5327 psi.
- 4. The current producing rate of the Cage Ranch No. 4 is 1450 MCF/D, and the rate is no longer declining as steeply as it did initially.
- 5. Gas proration units of 320 acres are appropriate for temporary field rules.
 - a. The cumulative production of the discovery well between March 19 and July 18, 2001, is 200 MMCF of gas.
 - b. Assuming 20% decline annually, the discovery well has remaining reserves of 2.3 BCF.
 - c. Volumetric analysis indicates that there are 3.2 BCF of recoverable gas in place under 320 acres in this reservoir.
 - d. The expected ultimate recovery of the Cage Ranch No. 4 will drain an estimated 252 acres.
- 6. Well spacing of 1320-2640 feet is standard for 320-acre density.
- 7. The discovery well was perforated from 9021 to 9024 feet, in a Frio sandstone what extends from 9010 feet to 9031 feet as shown on the log of the United Cage Ranch Well No. 4.
- 8. Allocation based on acreage will protect correlative rights.

CONCLUSIONS OF LAW

1. Proper notice was given as required by statute.

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- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
- 3. The requested temporary 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 temporary field rules be adopted for the Ellen, N.W. (9000 Sand) Field, and be reviewed in 18 months.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: August 7, 2001