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May 1, 1995

OIL AND GAS DOCKET NO. 7B-0208373

**APPLICATION OF PRINCIPAL OIL CORPORATION TO CONSIDER TEMPORARY
FIELD RULES IN THE X-RAY. S. (MARBLE FALLS) FIELD, ERATH COUNTY,
TEXAS**

HEARD BY: Thomas H. Richter, P.E.

DATE OF HEARING: April 24, 1995

APPEARANCES:

Joe Christina
Tommie Wilson

REPRESENTING:

Principal Oil Corporation

PROTESTANT: None

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of Principal Oil Corporation for the Commission to consider adoption of the proposed temporary field which provides for:

1. The entire correlative interval from 3,548' to 3,649' subsurface depth should be designated as the X-Ray, S. (Marble Falls) Field.
2. Minimum well spacing of 660'/1,320' (lease line/between well),
3. 160 acre gas proration units with 10% tolerance and a maximum diagonal of 7,500'; and
4. 100% deliverability allocation formula.

The examiner recommends approval.

DISCUSSION OF THE EVIDENCE

The X-Ray, S. (Marble Falls) Field was discovered October 22, 1979 at 3,571' subsurface depth. Special field rules were adopted by Order No. 7B-76,625 effective June 15, 1981 which provide for minimum well spacing of 660'/1,320' (lease line/between well), 320 acre gas proration units with a 10% tolerance and a maximum diagonal of 6,500; and a 100% acreage allocation formula. The temporary field rules were rescinded by Order No. 7B-84,319 effective March 18, 1985. The former producing wells have all been plugged and abandoned. Currently the proration schedule indicates that there are 3 wells in the field. Two (2) of the wells, the Ben Chambers Well No. 1 and R. Nat Wofford Well No. 1, have been designated as domestic gas wells and are no longer prorated. Production was reestablished by completion of the Principal Petroleum - Whitis Well No. 1 on December 29, 1994 through perforations from 3,562' to 3,564' subsurface depth. The reservoir pressure was measured at 1,533 PSI. Basic reservoir parameters are: average porosity 10% to 18%, average water saturation 23%, and the permeability of 8 millidarcies. It is proposed that the entire correlative interval from 3,548' to 3,649' subsurface depth as shown on the HRI SDL-DSL Microlog of the Principal Oil Corporation-Whitis Well No. 1 in BLK 13 of the A.M.K. Hoppe Survey, A-352, Erath County should be designated as the X-Ray, S. (Marble Falls) Field.

The field limits of the subject field are relatively well defined as there have been numerous wells drilled in the area which at least penetrate the subject formation. The subject well is currently shut-in awaiting a pipeline connection. The highest flow rate on the well was 830 MCF of gas per day. The calculated absolute open flow rate of 2,620 MCF of gas per day.

A well in the subject field can reasonably be expected to efficiently and effectively drain a 160 acre area. The proposed density is based on volumetric estimations for a 160 acre area. The estimated gas-in-place is 1,351 MMCF of gas. Recoverable gas-in-place is calculated to be 1,030 MMCF of gas. Principal has 4 other tracts that it intends to drill wells on. The proposed maximum diagonal of 7,500' is based on the diagonal of each of these tracts.

The proposed minimum well spacing of 660'/1,320' is the Commission's preferred minimum well spacing for 160 acre density.

The 100% deliverability allocation formula will provide for the protection of correlative rights.

EXAMINER'S OPINION

Based on the limited data at this time, the examiner believes that the proposed special field rules should be adopted until additional data can be obtained.

FINDINGS OF FACT

Based on the evidence presented, the examiner proposes the following findings:

1. Notice of this hearing was sent to all operators in the subject field at least ten (10)

- days prior to the subject hearing.
2. There was no protest at the call of the hearing.
 3. The X-Ray, S. (Marble Falls) Field was discovered October 22, 1979 at 3,571' subsurface depth.
 - a. Special field rules were adopted by Order No. 7B-76,625 effective June 15, 1981 which provide for minimum well spacing of 660'/1,320' (lease line/between well), 320 acre gas proration units with a 10% tolerance and a maximum diagonal of 6,500; and a 100% acreage allocation formula.
 - b. The temporary field rules were rescinded by Order No. 7B-84,319 effective March 18, 1985.
 - c. The former producing well have all been plugged and abandoned.
 4. The entire correlative interval from 3,548' to 3,649' subsurface depth as shown on the HRI SDL-DSL Microlog of the Principal Oil Corporation-Whitis Well No. 1 in BLK 13 of the A.M.K. Hoppe Survey, A-352, Erath County should be designated as the X-Ray, S. (Marble Falls) Field.
 - a. Currently the proration schedule indicates that there are 3 wells in the field. Two (2) of the wells, the Ben Chambers Well No. 1 and R. Nat Wofford Well No. 1, have been designated as domestic gas wells and are no longer prorated.
 5. A well in the subject field can reasonably be expected to efficiently and effectively drain a 160 acre area.
 - a. The proposed density is based on volumetric estimations for a 160 acre area.
 - b. The estimated gas-in-place is 1,351 MMCF of gas. Recoverable gas-in-place is calculated to be 1,030 MMCF of gas.
 - c. The subject well is currently shut-in awaiting a pipeline connection. The highest flow rate on the well was 830 MCF of gas per day.
 - d. The calculated absolute open flow rate of 2,620 MCF of gas per day.
 6. The proposed minimum well spacing of 660'/1,320' is the Commission's preferred minimum well spacing for 160 acre density.
 7. The 100% deliverability allocation formula will provide for the protection of correlative rights.

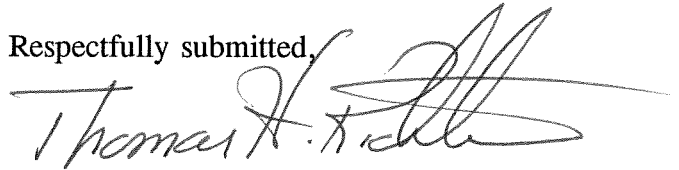
CONCLUSIONS OF LAW

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Consideration of temporary field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.
4. Adoption of the proposed temporary field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed temporary field rules for the X-Ray, S. (Marble Falls) Field for a period of eighteen (18) months.

Respectfully submitted,



Thomas H. Richter, P.E.
Technical Hearings Examiner

Date of Commission Action

May 23, 1995