

RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

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CAPITOL STATION — P. O. DRAWER 12967

AUSTIN, TEXAS 78711

June 5, 1981

OIL AND GAS DOCKET NO. 7B-76,625

APPLICATION OF HEXAGON OIL AND GAS INC. FOR THE ADOPTION OF
TEMPORARY FIELD RULES IN THE X-RAY SOUTH (MARBLE FALLS) FIELD,
ERATH COUNTY, TEXAS

HEARD BY: Brian R. Sullivan

FOR APPLICANT: Ms. Carol Martin and Mr. Michael E. Locke

EXAMINER'S REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

This is the application of Hexagon Oil & Gas, Inc. for the adoption of temporary gas field rules in the X-Ray South (Marble Falls) Field, Erath County, Texas. The applicant witness, Michael E. Locke, and presented the following testimony:

The applicant proposed the following rules:

Spacing: 660'/1320'

Proration Units: 320 acre with 10% tolerance

Diagonal: 7500'

Allocation Formula: 100% Acreage

Surface Casing: Texas Department of Water Resources

The X-Ray South (Marble Falls) Field is a new field that currently has four wells capable of producing. None of the wells are producing at this time because they are awaiting gas line hook-ups. The applicant's reservoir data sheet indicates that the subject field occurs at a depth of 3500' and it is made up of limestone. The average porosity is 5% and the average water saturation is 35%. The reservoir pressure is 1550 psi with an average net pay of 12 feet. The reservoir temperature is 102 degrees Fahrenheit and the specific gravity of the gas was .7. The applicant also submitted permeability calculations indicating that for two of the wells the average permeability would be between 2.4 and 3.4 millidarcies. From this information the engineer inferred that 320 acres would be the proper gas proration unit size. The applicant also requested shorter spacing than is normally permitted due to lease line problems and pinch-outs evident from the cross-sections.

FINDINGS OF FACT

Based on the evidence of record, the examiner makes the following findings of fact:

1. There are currently four wells completed in the X-Ray South (Marble Falls) Field.
2. There is no production from the subject wells as the gas pipeline to them has not yet been built.
3. Permeability calculations indicate that the Marble Falls formation has a permeability of between 2.4 and 3.4 millidarcies.
4. The Marble Falls zone has the following characteristics: Average porosity, 5%; average water saturation, 35%; reservoir pressure, 1550 psi; average net pay 12'; reservoir temperature, 102 degrees Fahrenheit; and the gas has a specific gravity of .7.
5. A spacing of 660' from lease lines and 1320' from between wells is requested because of lease restrictions and pinch-outs that occur as are evident on the cross-section.

CONCLUSIONS OF LAW

Based on the above findings and statutory powers and duties of the Railroad Commission, the examiner makes the following conclusion of law:

1. That the requested adoption of temporary gas field rules is a conservation properly within the Commission's jurisdiction.

RECOMMENDATION

Based on the foregoing findings and conclusions, the examiner recommends the attached order adopting gas field rules for the X-Ray (Marble Falls) Field, Erath County, Texas.

Respectfully submitted,



Brian R. Sullivan
Legal/Technical Examiner

BRS:jd

RECOMMENDATION APPROVED:

RECOMMENDATION DENIED:

B. W. Harris Chief Engineer _____

Date of Commission Action: _____