## OIL AND GAS DOCKET NO. 05-0227421

THE APPLICATION OF MAP PRODUCTION COMPANY, INC., FOR TEMPORARY FIELD RULES IN THE SCHENECKER (PETTIT) FIELD, HENDERSON COUNTY, TEXAS

**Heard by:** Margaret Allen, Technical Hearings Examiner

# **Procedural history**

Application received: February 6, 2001

Hearing held: April 19, 2001

# **Appearances**

Representing

Steve Towns Map Production Company, Inc.

**Bob Hulse** 

### **EXAMINER'S REPORT AND RECOMMENDATION**

# STATEMENT OF THE CASE

Map Production is seeking the following temporary field rules for the Schenecker (Pettit) Field:

- 1. 933-1867 feet well spacing;
- 2. 160 acre oil proration units with 40-acre tolerance for the last well on a lease and a maximum diagonal of 4500 feet; and
- 3. allocation based on acreage.

The examiner requested that an interval be designated for the field, based on a type log.

#### **DISCUSSION OF THE EVIDENCE**

The discovery well for the Schenecker (Pettit) Field is the Deason Lease Well No. 1, recompleted to the Pettit in January of 2001, by Map Production. The well was first drilled by Penn Resources in 1984, as the Penn-Deason Lease Well No. 1, and originally produced from the Pennwell (Rodessa-Gloyd) Field.

This well was perforated from 10,044 to 10,050 feet, measured depth, and its initial potential was 16 BOPD and 23 MCF/D, with no water. The G-10 potential test shows the well capable of flowing 66 BOPD, with a gas/oil ratio of 1455 cubic feet per barrel. The Pettit A is the productive

reservoir in the Deason No. 1 and it occurs between 10,026 feet and 10,050 feet, measured depth. The log of this Pettit A interval shows six feet of pay with an average porosity of 10%.

Because of the limited production history of the Deason No. 1, Map used wells in nearby Pettit A fields as models. The McDonald No. 1, in the McDonald (Sligo) Field had three feet of net effective pay, as confirmed by core analysis, and produced 46,000 barrels of oil before the casing collapsed. The Cook No. A-1, in the Fairway (Pettit) Field, had 6 feet of pay and produced 115,000 BO before being abandoned. Published sources indicate the average Pettit field can produce 80 to 100 BO per acre-foot. Assuming the average of 90 barrels of recoverable oil per acre-foot, the McDonald well drained 171 acres before its mechanical problems and the Cook No. A-1 drained 213 acres.

The McDonald well produced for 8 years, at an annual decline rate of 10%, before mechanical problems forced it to be abandoned. Map has had other Pettit wells that have produced steadily for as much as 18 years. Map believes that the Deason No. 1 has a reasonable chance to drain over 80 acres and may drill additional wells in the subject field. The Fairway (Pettit) Field, produces from the same Pettit A member as the Deason No. 1, and it has 660-1867' well spacing and 160-acre oil proration units. Other fields producing from the Pettit formation in general also have 160 acre oil proration units.

Spacing of 933-1867 feet is standard for 160-acre proration units. 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 operators and unleased mineral interest owners of tracts offsetting the discovery tract on March 23, 2001.
- 2. The discovery well, the Deason Lease Well No. 1, was perforated from 10,044 to 10,050 feet, and its initial potential was 16 BOPD and 23 MCF/D, with no water.
- 3. The well was recently retested and has a daily potential rate of 66 BO with a gas/oil ratio of 1455 cubic feet per barrel.
- 4. Temporary rules specifying 160 acre units are appropriate for a period of 18 months.
  - a. The discovery well in the field is producing 50 to 85 BOPD with a gas/oil ratio of 1400 cubic feet per barrel.
  - b. Published sources indicate that there are 80 to 100 barrels of recoverable oil per acrefoot of Pettit reservoirs.
  - c. Other wells producing from the Pettit A have produced 46,000 to 115,000 barrels of oil and calculations indicate their drainage areas were from 171 to 213 acres.

- d. Nearby Pettit oil fields also have 160 acre proration units.
- e. Pettit A reservoirs tend to be very thin and to produce steadily for many years.
- 5. The Pettit A reservoir extends from 10,026 feet to 10,050 feet on the log of the Deason Lease Well No. 1.
- 6. Well spacing of 933-1867 feet is standard for 160-acre proration units.
- 7. Allocation 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 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 for the Schenecker (Pettit) Field be approved and reviewed in 18 months.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: May 8, 2001.