#### OIL AND GAS DOCKET NO. 7C-0227646

THE APPLICATION OF THE PICKENS COMPANY, INC. FOR INCREASED GAS OIL RATIO AUTHORITY FOR ITS STANSBERRY HEIRS LEASE WELL NO. 3, BRADY MOUNTAIN, E. (CANYON) FIELD, CONCHO COUNTY, TEXAS

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

**Procedural history** 

Application received: February 28, 2001

Hearing held: April 11, 2001

**Appearances** 

Representing

Sol Smith The Pickens Company, Inc.

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

## **STATEMENT OF THE CASE**

The Pickens Company is seeking increased gas/oil ratio authority for its Stansberry Heirs Lease Well No. 3 to allow this well to produce up to 400 MCF per day.

### **DISCUSSION OF THE EVIDENCE**

The Stansberry Heirs Well No. 3 was the discovery well for the Brady Mountain, E. (Canyon) Field and is surrounded by dry holes. The well was completed in December of 1999, with perforations from 3151 to 3157 feet. The initial potential was 62 BOPD, with 60 MCF per day and no water.

There was no market for the gas at the time of completion and the well has only recently been produced regularly. The cumulative production is 6963 BO and 41 MMCF of gas. Initial reservoir pressure was 1174 psi and it has already decreased to 660 psi. The gas/oil ratio is increasing as a natural result of depletion of the solution gas drive.

The subject well's allowable is 100 BOPD and 200 MCF/D. A step-rate test was conducted between March 10 and April 8, 2001, which showed that the well can be produced at higher gas rates without causing waste. On an 18/64th inch choke, the average daily rates were 33 BO and 424 MCF, for a gas/oil ratio of 13,008 cubic feet per barrel. On a choke of 14/64th inches, the well produced 20 BO and 296 MCF per day, with a gas oil ratio of 14,836 cubic feet per barrel. When the choke size was decreased to about 13/64th inches, the daily rates averaged 17 BO and 252 MCF, for a gas/oil ratio of 14,541 cubic feet per barrel. The applicant is requesting a net gas/oil ratio with a

daily gas limit of 400 MCF per day.

The well has accumulated 4300 MCF of gas overproduction. No other wells will be completed in this field and there is no reason to restrict the well's production to protect correlative rights.

### **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all operators in the Brady Mountain, E. (Canyon) Field and to all offset operators on March 15, 2001.
- 2. The subject well, the Stansberry Heirs No. 3, was drilled in 1999 and has perforations from 3151 to 3157 feet.
- 3. This well is the only active well in the Brady Mountain, E. (Canyon) Field.
- 4. The current allowable is 100 BOPD with 200 MCF of gas per day.
- 5. The well was step-rate tested between March 10, and April 8, 2001, and the results show that it can produce steadily at higher rates without causing waste.
  - a. On an 18/64th inch choke the average daily rates were 33 BO and 424 MCF, for a gas/oil ratio of 13,008 cubic feet per barrel.
  - b. On a choke of 14/64th inches, the well produced 20 BO and 296 MCF per day, with a gas oil ratio of 14,836 cubic feet per barrel.
  - c. When the choke size was decreased to about 13/64th inches, the daily rates averaged 17 BO and 252 MCF, for a gas/oil ratio of 14,541 cubic feet per barrel.
- 6. The well's cumulative production is 6963 and 41 MMCF of gas, while reservoir pressure has already decreased from 1174 to 660 psi.
- 7. The gas/oil ratio is increasing as a natural result of the solution gas drive and it will continue to increase.
- 8. Requiring the well to stay within its current daily gas limit of 200 MCF will not increase the well's ultimate oil recovery.
- 9. This is the only well in this reservoir and requiring the well to make up overproduction is not necessary to 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 increase in gas allowable for the Stansberry Heirs Lease Well No. 3 will not cause waste and will protect correlative rights within the field.

## **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the Stansberry Heirs Lease Well No. 3, operated by The Pickens Company in the Brady Mountain, E. (Canyon) Field, be allowed to produce up to 400 MCF of gas per day. All overproduction for this well should be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: April 24th, 2001

# Exhibits

- 1. Proration schedule
- 2. Map
- 3. Final order transferring the well to the current field
- 4. Forms W-2
- 5. Log
- 6. Decline curves
- 7. Monthly production tabulation
- 8. GOR over time