THE APPLICATION OF EOG RESOURCES, INC. TO CONSIDER INCREASED NET GOR AUTHORITY FOR THE MARTIN 800 WELL NO. 3-H, MAMMOTH CREEK, NORTH (CLEVELAND) FIELD, LIPSCOMB COUNTY, TEXAS

**Heard by:** Andres J. Trevino on March 27, 2007

Appearances: Representing:

John Soule Barbara Kline EOG Resources, Inc.

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

## STATEMENT OF THE CASE

EOG Resources, Inc. requests authority to produce its Martin 800 Well No. 3-H under increased net gas-oil ratio authority with a daily gas limit of 500 MCFD. EOG also requests that all overproduction for the well be canceled.

This application was unprotested and the examiner recommends approval of increased net gas-oil ratio authority with a daily gas limit of 500 MCFD and cancellation of overproduction.

#### **DISCUSSION OF EVIDENCE**

The Mammoth Creek, North (Cleveland) Field was discovered in 1961 as a gas field at a depth of approximately 7,500 feet. The first oil completion was made in 1990. There are currently five producing oil wells in the field. The top allowable in the field is 121 BOPD, with a casinghead gas limit of 242 MCFD per well. The associated gas field is AOF.

The Martin 800 No. 3-H was completed in October 2006. The well has a horizontal lateral in the Cleveland approximately 1,100 feet long. On initial test, the well produced at a rate of 311 BOPD, 1,349 MCFD and 103 BWPD.

After a couple of months, production from the well declined down to less than 100 BOPD while gas production was constant at 700-800 MCFD. Tubing was run in the well in December and production increased to about 200 BOPD. The well's production has leveled off at about 40-50 BOPD and 500 MCFD.

During April and May, the well was tested at various rates. Flowing through a 48/64" choke the well averaged 455 MCFD with a gas-oil ratio of 14,100 cubic feet per barrel. On a 24/64" choke, the well averaged 443 MCFD with a gas-oil ratio of 14,200 cubic feet per

barrel. On 1 16/64" choke, the well averaged 443 MCFD with a gas-oil ratio of 16,500 cubic feet per barrel. However, on the 16/64" choke, the flowing tubing pressure began to decrease significantly from 560 psi to 280 psi. A further reduction in choke to 12/64" resulting in the well completely loading up. Restricting the well to a rate of 242 MCFD is not feasible.

The well has received a penalized oil allowable since completion due to the high gas-oil ratio. Cumulative production from the well is 15,500 BO and 115 MMCF of gas. The well is overproduced 7,600 BO and 76 MMCF of gas as of April 2, 2007. EOG requests cancellation of this overproduction.

# FINDINGS OF FACT

- 1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
- 2. The Mammoth Creek, North (Cleveland) Field is an associated gas field which was discovered in 1961. There are currently five producing oil wells in the field and the gas field is AOF.
- 3. The top allowable in the field is 121 BOPD, with a casinghead gas limit of 242 MCFD per well.
- 4. The Martin 800 No. 3-H produces most efficiently at a rate of approximately 30-40 BOPD and 500 MCFD. At reduced rates, the gas-oil ratio increases. The well loads when the attempts were made to produce the well at its allowable rate of 242 MCFD.
- 5. The well is overproduced approximately 7,600 BO and 76 MMCF of gas.

# **CONCLUSIONS OF LAW**

- 1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
- 2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
- 3. Approval of increased net gas-oil ratio authority with a casinghead gas limit of 500 MCFD for the Martin 800 Well No. 3-H in the Mammoth Creek, North (Cleveland) Field and cancellation of overproduction will prevent waste and will not harm correlative rights.

## RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that

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the Martin 800 Well No. 3-H in the Mammoth Creek, North (Cleveland) Field be authorized to produce under net gas-oil ratio authority with a daily gas limit of 500 MCFD and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Andres J. Trevino Technical Examiner