THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE MARSHALL (MIDDLE WILCOX) FIELD, GOLIAD COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: April 6, 2006

Hearing held: May 18, 2006

Appearances

Representing

Chesapeake Operating, Inc.

Bill G. Spencer Cary McGregor Christian Combs Aaron Peterson

James Bostic Etoco, L. P.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules for the Marshall (Middle Wilcox) Field were adopted in Final Order No. 02-0230162, issued effective February 5, 2002, as amended. The rules in the Final Order can be summarized as follows:

- 1. Designated interval between 9858' and 11,100' as shown on the log of the Chesapeake Operating Inc. Robinson Lease Well No. 1; and
- 2. allocation based 5% per well and 95% on deliverability, with the formula suspended.

Chesapeake Operating, Inc. (Chesapeake") is requesting that the top of the designated interval be raised to a depth of 9560' and the bottom be lowered to a depth of 12,459' as shown on the log of the Chesapeake Robinson-Reaves Lease Well No. 3.

A representative of Etoco L.P. appeared at hearing to support this application.

DISCUSSION OF THE EVIDENCE

The Marshall (Middle Wilcox) Field was discovered in 2001 and already has 40 gas wells—35 of them operated by Chesapeake. There are four other operators and a number of wells are being drilled or are permitted. The wells extend from southwest to northeast along a fault. Deliverabilities of

individual wells have been as high as 10 MMCFD.

Daily gas production from the field reached 782 MMCF but is now about 558 MMCF. Cumulative production from the discovery well, the Robinson No. 1 (now the Robinson-Reaves No. 1) is 3.9 BCF and 60,000 BO. Twelve other wells have already produced over 1 BCF. Different wells have encountered different numbers of sandstones and the gross perforated intervals range from 10' to 1579'.

The original designated interval extended from the Middle Wilcox L-3 through the M-1 sandstone. These sandstones have low permeability and are overpressured, which can put wellbores at risk of premature failure. Because of the low permeability, the sandstones have to be fracture stimulated and consolidation of large intervals allows all of the producing sandstones to be fractured together.

Various wells have encountered tight, overpressured sandstones above and below the field's current designated interval. Chesapeake proposes the type log be changed to the Robinson-Reaves No. 3. The proposed expanded designated interval includes all of the Middle Wilcox and extends from the top of the L-1 sandstone at 9560', through the L-4D sand, and through the M-1 through M-5 sandstones to the base of the upper Holt sandstone at 12,459'.

Several of the wells that have less then 50' of gross perforated interval have already produced over ½ BCF. However, a number of the sandstones, such as the upper Holt, are marginal and could not be developed unless commingled with other sands. Allowing marginal sandstones to be produced along with more prolific ones will prevent waste. All of these sandstones are Middle Wilcox in age and have similar rock and fluid properties.

FINDINGS OF FACT

- 1. Notice of this hearing was mailed to all operators in the Marshall (Middle Wilcox) Field on April 10, 2006.
- 2. The Marshall (Middle Wilcox) Field was discovered in 2001 and already has 40 gas wells, 35 operated by Chesapeake Operating, Inc.
- 3. The current designated interval is between 9858' and 11,100' as shown on the log of the Chesapeake Operating Inc. Robinson Lease Well No. 1.
- 4. The field is developing rapidly and some wells have encountered productive sandstones above and below the current designated interval.
- 5. All of these additional sandstones are overpressured Middle Wilcox intervals and many cannot economically be developed by themselves.
- 6. Redefining the designated interval to between 9560' and 12,459' as shown on the log of the Chesapeake Robinson-Reaves Lease Well No. 3 will encourage the development of marginal sandstones and prevent waste.

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 amendment to the field rules will prevent waste, protect correlative rights and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends approval of the request by Chesapeake Operating, Inc. to expand the correlative interval in the Marshall (Middle Wilcox) Field, as per the attached order.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner