THE APPLICATION OF ENCORE OPERATING, LP TO ESTABLISH AN MER FOR THE P. J. LEA "B" LEASE WELL NO. 70 IN THE LEA (PENN. DETRITAL) FIELD, CRANE COUNTY, TEXAS

Heard by: Richard D. Atkins, P.E. - Technical Examiner

Hearing Date: April 29, 2008

Appearances:

Representing:

Bill Spencer Thomas W. Zaddick, P.E. Encore Operating, LP

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Encore Operating, LP requests an MER of 400 BOPD for its P. J. Lea "B" Lease Well No. 70 in the Lea (Penn. Detrital) Field. Encore also requests that all accumulated overproduction be cancelled for the P. J. Lea "B" Lease.

The application is unprotested and the examiner recommends approval of the requested MER and cancellation of lease overproduction.

DISCUSSION OF EVIDENCE

Encore is the only operator in both the Lea (Penn.) and Lea (Penn. Detrital) Fields. The P. J. Lea "B" Lease Well No. 70 was completed in the Lea (Penn. Detrital) Field in October 2005 from selective perforations between 7,486 feet to 7,738 feet. A static bottomhole pressure survey recorded a bottomhole pressure of 2,487 psig at a depth of 7,612 feet. The well had an initial potential on rod pump of 101 BOPD, 71 MCFGPD and 51 BWPD with a GOR of 703 cubic feet per barrel.

In October 2007, the Lea (Penn. Detrital) pay zone was isolated and the well was completed in the Lea (Penn.) Field from perforations at 7,122 feet to 7,132 feet and 7,248 feet to 7,258 feet. A static bottomhole pressure survey recorded a bottomhole pressure of 1,260 psig at a depth of 7,190 feet. No initial potential test was recorded.

In December 2007, both zones were commingled and the well was assigned to the Lea (Penn. Detrital) Field. It potentialed on rod pump for 351 BOPD, 349 MCFGPD and 51 BWPD with a GOR of 994 cubic feet per barrel. The top allowable in the field is 121

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BOPD, with an allowable gas-oil ratio of 2,000 cubic feet per barrel.

Encore stated that the different static bottom hole pressures indicate that there is a potential for cross flow if the well is not efficiently pumped. In an attempt to produce the well at the allowable rate, Encore has been varying the runtime of the pump and decreasing the casing choke size. This has resulted in a decline in total fluid production to 130 BPD and the GOR has increased from 1,000 cubic feet per barrel to over 4,000 cubic feet per barrel. Encore believes that the higher rate of gas production is reducing the pump efficiency and curtailing fluid production. Both the static pressure data and production performance indicate that the curtailed production is resulting in the loss of reserves due to cross flow between the zones.

Encore requests an MER of 400 BOPD for the P. J. Lea "B" Lease Well No. 70 and cancellation of any P. J. Lea "B" Lease overproduction that may exist.

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. Encore is the only operator in both the Lea (Penn.) and Lea (Penn. Detrital) Fields. The top allowable in the Lea (Penn. Detrital) is 121 BOPD, with an allowable gas-oil ratio of 2,000 cubic feet per barrel.
- 3. The P. J. Lea "B" Lease Well No. 70 was completed in the Lea (Penn. Detrital) Field in October 2005. A static bottomhole pressure survey recorded a bottomhole pressure of 2,487 psig at a depth of 7,612 feet.
- 4. In October 2007, the Lea (Penn. Detrital) pay zone was isolated and the well was completed in the Lea (Penn.) A static bottomhole pressure survey recorded a bottomhole pressure of 1,260 psig at a depth of 7,190 feet.
- 5. In December 2007, both zones were commingled and the well was assigned to the Lea (Penn. Detrital) Field. It potentialed on rod pump for 351 BOPD, 349 MCFGPD and 51 BWPD with a GOR of 994 cubic feet per barrel.
- 6. In an attempt to produce the well at the allowable rate, Encore has been varying the runtime of the pump and decreasing the casing choke size. This has resulted in a decline in total fluid production to 130 BPD and the GOR has increased from 1,000 cubic feet per barrel to over 4,000 cubic feet per barrel.
- 7. Both the static pressure data and production performance indicate that the curtailed production is resulting in the loss of reserves due to cross flow between the zones.
- 8. Producing the P. J. Lea "B" Lease Well No. 70 at rates up to 400 BOPD will

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not cause waste.

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 an MER of 400 BOPD for the P. J. Lea "B" Lease Well No. 70 and cancellation of the P. J. Lea "B" Lease overproduction in the Lea (Penn. Detrital) Field will not cause waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends approval of an MER of 400 BOPD for the P. J. Lea "B" Lease Well No. 70 and cancellation of overproduction for the P. J. Lea "B" Lease in the Lea (Penn. Detrital) Field.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner