

August 22, 2006

**OIL AND GAS DOCKET NO. 10-0248351**

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**APPLICATION OF MEWBOURNE OIL COMPANY TO CONSIDER AN EXCEPTION TO STATEWIDE RULE 10 FOR THE WHITE LEASE WELL NO. 571, IN THE HAYWOOD (ATOKA), ELLIS RANCH (MORROW, UPPER) AND FARNSWORTH, EAST (MORROW, LOWER) FIELDS, OCHILTREE COUNTY, TEXAS**

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**HEARD BY:** Thomas H. Richter, P.E.

**DATE OF HEARING:** August 15, 2006

**APPEARANCES:**

James M. Clark

**REPRESENTING:**

Mewbourne Oil Company

**EXAMINER'S REPORT AND RECOMMENDATION**  
**STATEMENT OF THE CASE**

This is the unprotested application of Mewbourne Oil for Commission approval to downhole commingle its White Lease Well No.571 in the Haywood (Atoka) , Ellis Ranch (Morrow, Upper) and Farnsworth, East (Morrow, Lower) Fields. A public hearing was required because there are different mineral interest ownerships because of a depth separation. The examiner recommends approval.

**DISCUSSION OF THE EVIDENCE**

The Haywood (Atoka) Field was discovered in 1958 at approximately 7,675 feet subsurface depth. The field is governed by Statewide Rules and classified as an Associated - Exempt. There are 8 operators in the field with 12 wells and there are no wells with a deliverability greater than 155 MCFD. The "oil" side of the field was discovered in 1958 and the top allowable for a well in the field at this depth is 101 BOPD. There are five operators in the field and 8 producing wells and no well is capable of producing in excess of 5 BOPD.

The Ellis Ranch (Morrow, Upper) Field was discovered in 1959 at approximately 6,930 feet subsurface depth. The field is governed by Special Field Rules that provide for minimum well spacing of 1250'/2500' and 640 acre density. The allocation formula has been suspended since January 1999 and the field is classified as an Associated - 100% AOF. There are 3 operators in the field with 4 active wells and there are no wells with a deliverability greater than 355 MCFD. There are no wells listed on the "oil" side of the field.

The Farnsworth, East (Morrow, Lower) Field was discovered in 1957 at approximately 8,712 feet subsurface depth. The field is governed by Special Field Rules that provide for minimum well spacing of 1867'/3735' and 640 acre density. The field is classified as Non-Associated-Prorated. There are 3 operators in the field with 1 active well with a deliverability of 93MCFD. One other

well is listed as "T.A" and the other indicates "partial plug".

The White Lease Well No.571 was completed in the Farnsworth, East (Morrow, Lower) Field through perforations from 9,894' to 9,916' on December 6, 2005. The well potentialed at 200 MCFD, 2 BOPD and 1 BWPD with a flowing tubing pressure of 130 psig (estimated BHP of 1600 psig). A cast iron bridge plug (CIBP) was set over the perforations and the well was re-perforated in the Ellis Ranch (Morrow, Upper) Field from 8,177' to 8,228' subsurface depth. The well potentialed at 300 MCFD, BOPD and 1 BWPD with a flowing tubing pressure of 120 psig (estimated BHP of 2500 psig). A CIBP was set over the perforations and the well was re-perforated in the Haywood (Atoka) Field from 7,733' to 7,786' subsurface depth. The well potentialed at 40 MCFD, 2 BOPD and 0 BWPD with a flowing tubing pressure of 120 psig (estimated BHP of 2500 psig). The well continues to produce from the Haywood (Atoka) Field only awaiting downhole commingling authority to include the other two fields.

The Rule 37 Exception was required for the completions in the two fields with special field rules (Case No. 0244245). It is anticipated that the well after commingling will eventually require plunger lift. The well is completed with 4-1/2" production casing and it is not feasible to run two strings of tubing for the lower zones and produce the Atoka in the casing annulus because of fluid loading. Crossflow is not anticipated as indicated by the low flowing pressures. Formation fluids have been tested for compatibility for scaling and will be treated with inhibitors if necessary to prevent formation or casing-tubing problems.

Downhole commingling will provide for the recovery of reserves that would otherwise not be recovered. Commingling will optimize the recovery from each zone and save on operating costs. All zones will share in reaching an individual lower economic limit as one rather than a higher economic limit per zone. The Upper Morrow is estimated to recover 300 MMCF of gas, the Lower Morrow is estimated to recover 400 MMCF and the Atoka recover 125 MMCF. An additional 75 MMCF of gas will be recovered by downhole commingling the three zones. It is proposed the well be placed in the Farnsworth, East (Morrow, Lower) Field if downhole commingling is approved and the CIBP's will be removed from the lower two perforated intervals.

A fair and reasonable allocation is necessary as there is a royalty ownership difference between the two Morrow zones and the Atoka zone. The working interest ownership is the same in all the subject fields. Kerr McGee Oil & Gas has no royalty interest in the Morrow zones and 6.25% interest in the Atoka. J.M. Huber Corp has 6.25% royalty interest in the Atoka and no royalty interest in the Morrow zones. The proposed allocation for gas is 89% from the Morrow zones and 11% from the Atoka and for the oil production is 50% from the Morrows and 50% from the Atoka is appropriate. The allocations are based on the estimated ultimate recovery from each zone and the rate of production that was observed at the testing of each of the zones as determined previously.

#### **FINDINGS OF FACT**

1. Notice of this hearing was sent to all person entitled to notice at least ten (10) days prior the subject hearing.

2. There was no protest at the call of the hearing.
3. The Haywood (Atoka) Field was discovered in 1958 at approximately 7,675 feet subsurface depth and is governed by Statewide Rules and classified as an Associated - Exempt.
4. The Ellis Ranch (Morrow, Upper) Field was discovered in 1959 at approximately 6,930 feet subsurface depth and is governed by Special Field Rules that provide for minimum well spacing of 1250'/2500' and 640 acre density. The allocation formula has been suspended since January 1999 and the field is classified as an Associated - 100% AOF.
5. The Farnsworth, East (Morrow, Lower) Field was discovered in 1957 at approximately 8,712 feet subsurface depth and is governed by Special Field Rules that provide for minimum well spacing of 1867'/3737' and 640 acre density. The field is classified as Non-Associated-Prorated.
6. The Mewbourne Oil Co., White Lease Well No. 571 was completed in the Farnsworth, East (Morrow, Lower) Field through perforations from 9894' to 9916' on December 6, 2005 and was potential tested and a cast iron bridge plug (CIBP) was set over the perforations.
  - a. The well was re-perforated in the Ellis Ranch (Morrow, Upper) Field from 8,177' to 8,228' subsurface depth and was potential tested and a CIBP was set over the perforations.
  - b. The well was re-perforated in the Haywood (Atoka) Field from 7,733' to 7,786' subsurface depth and was potential tested and is currently producing from the Haywood (Atoka) Field only awaiting downhole commingling authority to include the other two fields.
7. Downhole commingling will result in the recovery of 75 MMCF of incremental hydrocarbon reserves.
  - a. Commingling will optimize the recovery from each zone and save on operating costs.
  - b. All zones will share in reaching an individual lower economic limit as one rather than a higher economic limit per zone.
  - c. The Upper Morrow is estimated to recover 300 MMCF of gas, the Lower Morrow is estimated to recover 400 MMCF and the Atoka recovery to be 125 MMCF.
8. The well is a Rule 37 Exception in the two fields with special field rules (Case No. 0244245).

9. A fair and reasonable allocation is necessary as there is a royalty ownership difference between the two Morrow zones and the Atoka zone.
  - a. The working interest ownership is the same in all the subject fields.
  - b. Kerr McGee Oil & Gas has no royalty interest in the Morrow zones and 6.25% interest in the Atoka.
  - c. J.M. Huber Corp has 6.25% royalty interest in the Atoka and no interest in the Morrow zones.
  - d. The proposed allocation for gas is 89% from the Morrow zones and 11% from the Atoka and for the oil production is 50% from the Morrows and 50% from the Atoka.
  - e. e allocations are based on the estimated ultimate recovery from each zone and the rate of production that was observed at the testing of each of the zones as determined previously.
10. The subject well should be placed and prorated in the Farnsworth, East (Morrow, Lower) Field.

**CONCLUSIONS OF LAW**

1. Notice of this hearing and application was provided in accordance with all applicable and regulatory statutes and rules.
2. All things have occurred or have been accomplished to afford the Commission jurisdiction to decide this matter.
3. Consideration of approval of this application for exception to Statewide Rule 10 is a matter properly within the statutory jurisdiction of the Commission to foster conservation and prevent waste.
4. Approval of the downhole commingling request of Mewbourne Oil, White Lease Well No.571 in the Haywood (Atoka), Ellis Ranch (Morrow, Upper) and Farnsworth, East (Morrow, Lower) Fields will prevent waste, foster conservation, and protect correlative rights.

**EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends approval for downhole commingling of the Mewbourne Oil, White Lease Well No.571 in the Haywood (Atoka), Ellis Ranch (Morrow, Upper) and Farnsworth, East (Morrow, Lower) Fields.

Respectfully submitted,

Thomas H. Richter, P.E.  
Technical Examiner  
Office of General Counsel