THE APPLICATIONS OF NEWFIELD EXPLORATION COMPANY TO AMEND THE FIELD RULES FOR THE BRISCOE RANCH (EAGLEFORD) FIELD, DIMMIT, MAVERICK, WEBB AND ZAVALA COUNTIES, TEXAS

Heard by: Andres J. Trevino P.E., Technical Examiner Hearing Date: September 8, 2010 **Representing:** Appearances: Applicant: David Gross Newfield Exploration Company Dale E. Miller Interested Parties: Sandra Buch Pioneer Natural Resources USA, Inc. Tim George Exxon Mobil Corporation Lightning Oil Company Ana Maria Marsland-Griffith Anadarko E & P Clark Jobe Murphy Exploration & Production Co.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Newfield Exploration Company requests that the field rules for the Briscoe Ranch (Eagleford) Field be amended to increase the top allowable for oil wells to 800 BOPD and that there be no casinghead gas limit for oil wells. No other changes are proposed for the field.

The application was unprotested and the examiner recommends approval of the application.

DISCUSSION OF EVIDENCE

The Briscoe Ranch (Eagleford) Field was discovered in November 2007. There are approximately 10 oil wells and 32 gas wells completed in the field. Cumulative production

OIL AND GAS DOCKET NO. 01-0267032

from the field is over 5.6 BCF of gas and 694 MBO.

The Briscoe Ranch (Eagleford) Field extends into portions of 4 counties. The majority of the wells classified as oil wells are located in Maverick, Dimmit and Zavala Counties to the north while wells to the south in Webb County produce wet and dry gas. Horizontal drilling is expanding rapidly in oil sections of the Eagleford.

The current top allowable in the field is 172 BOPD based on the 1965 yardstick for 40 acres. It is common for newly completed wells to have very high initial production rates, followed by a steep decline. Newfield provided several examples of recent horizontal wells which produced in excess of 1,000 BOPD. These high initial rates result in overproduction for the wells during the first couple of months of production. Increasing the top allowable for oil wells will prevent the accumulation of overproduction and the issuance of shut-in letters.

The Eagleford Shale is a formation such that there is no gas cap/oil column which would require limitation of withdrawals of casinghead gas from oil wells. Because of the microdarcy permeability operators believe that there is no migration of fluids in the reservoir and wells only produce fluids that are contacted by the fracture treatment. A similar rule has been adopted in other fields with horizontal wells, specifically, the Newark, East (Barnett Shale), Eagleville (Eagle Ford1,2) and the Eagleville (Eagle Ford Sour) Fields. There is no conservation purpose in restricting allowable, as gas wells in the field are AOF.

FINDINGS OF FACT

- 1. Notice of these hearings was given to all persons entitled to notice at least ten days prior to the date of hearing.
- 2. The Briscoe Ranch (Eagleford) Field was discovered in November 2007. There are approximately 10 oil wells and 32 gas wells completed in the field.
- 3. Cumulative production from the field is over 5.6 BCF of gas and 694 MBO.
- 4. The Eagleford Shale has areas that produce oil, wet gas and dry gas. Horizontal drilling is expanding rapidly in the oil sections of the Eagleford Shale.
- 5. The current top allowable in the field is 172 BOPD based on the 1965 yardstick for 40 acres.
- 6. Typically, new oil wells have high initial rates of production, followed by steep decline. Several recent oil wells completed in the Eagleford Shale initially produced at rates in excess of 1,000 BOPD, resulting in overproduction.
- 7. Since wells only produce fluids that are contacted by the fracture treatment

OIL AND GAS DOCKET NO. 01-0267032

and the recovery factor is the same for both oil and gas wells, no casinghead gas limitation for oil wells is appropriate.

- 8. Since many wells in the Eagleford trend have high initial potentials of over 1,000 BOPD and there is no migration of reservoir fluids, an 800 BOPD allowable is appropriate for the field.
- 9. A similar 800 BOPD top allowable rule has been adopted in other fields with horizontal wells, specifically, the Newark, East (Barnett Shale), Eagleville (Eagle Ford1,2) and the Eagleville (Eagle Ford Sour) Fields.
- 10. Shutting in oil wells to make up overproduction is not necessary to prevent waste. The gas wells produce under AOF status.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Amending the field rules for the Briscoe Ranch (Eagleford) Field as proposed by Newfield Exploration Company will prevent waste, protect correlative rights and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the field rules for the Briscoe Ranch (Eagleford) Field be amended as proposed by Newfield Exploration Company.

Respectfully submitted,

Andres J. Trevino P.E. Technical Examiner