

**THE APPLICATION OF BBX OPERATING, LLC TO AMEND FIELD RULES TO ALLOW AN EXCEPTION TO STATEWIDE RULE 11 FOR THE MAGNOLIA SPRINGS (AUSTIN CHALK) FIELD, JASPER AND NEWTON COUNTIES, TEXAS, TEXAS**

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**HEARD BY:** Andres J. Trevino, P.E., on April 25, 2011

**APPEARANCES:**

**Applicant:**

George C. Neale  
Matt Telfer  
Mark Helmueller

**Representing:**

BBX Operating, LLC

Ana Maria Marsland-Griffith

Anadarko Exploration & Production

Michael E. McElroy

Devon Energy Production Co. L.P.

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

BBX Operating, LLC requests Field Rule 2 be amended to allow operators in the Magnolia Springs (Austin Chalk) Field an exception to Statewide Rule 11 when drilling the last 1,000 feet of a horizontal well. BBX Operating requests that directional survey shot points shall not be more than 500 feet apart for that portion of the horizontal well within 1,000 feet of the permitted total depth of any lateral.

This application was unopposed and the examiner recommends approval of the requested amended Field Rule 2 to allow an exception to Statewide Rule 11.

**DISCUSSION OF THE EVIDENCE**

Current field rules for the Magnolia Springs (Austin Chalk) Field require well spacing of 467 feet from lease lines, terminal and penetration points within 100 feet and 1,200 feet between vertical well spacing, 2,400 feet between horizontal well spacing, a box rule, 320 acre density with special provisions for additional acreage for horizontal wells. Current development in the field has operators drilling "bi-lateral " wells with each lateral drilled 4,000 to 6,000 feet long in opposite directions trending to the North/South.

Operators in the Magnolia Springs (Austin Chalk) Field, have experienced MWD tool sensor failures during the last 1,000 feet of drilling. BBX requests that for a horizontal well, the directional survey shot points shall not be more than 500 feet apart for that portion of the horizontal well within 1,000 feet of the permitted total depth of any lateral. Statewide Rule 11(c)(2)(B) requires that "All directional surveys...shall be either single shot surveys or multi-shot surveys with the shot points not more than 200 feet apart...". Operators in the field drill vertically to 13,000 feet then drill laterally for another 6,000 feet. Reservoir temperatures exceeding 330°F and vibrations from drilling thru natural fractures cause the MWD tool sensors to fail before drilling the final section of the lateral. Without the MWD sensors operating, shot points can not be taken, leaving the operators to only drill an additional 200 feet from the point of failure to be in compliance with Statewide Rule 11. BBX has experienced a 60% failure rate during the drilling of the last five wells. The termination of drilling operations prior to reaching TD will cause reserves to be left behind and cause waste. Attempting to replace the MWD tool and drilling the last 300 to 500 feet is uneconomic and risks the well as tools may become stuck during the 19,000 foot workover operation.

#### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice at least ten (10) days prior to the hearing.
2. Current field rules for the Magnolia Springs (Austin Chalk) Field require 467/1,200 feet vertical well spacing, 2,400 feet between horizontal well spacing, 100 feet terminal and penetration point spacing, a box rule, 320 acre density with special provisions for additional acreage for horizontal wells.
3. Current development in the field has operators drilling "bi-lateral " wells with drill vertically to 13,000 feet then drill laterally for another 4,000 to 6,000 feet long in opposite directions trending to the North/South.
4. The Austin Chalk has natural fractures trending in an east/west direction that operators drill into perpendicularly to recover hydrocarbon reserves.
5. Statewide Rule 11(c)(2)(B) requires that "All directional surveys...shall be either single shot surveys or multi-shot surveys with the shot points not more than 200 feet apart...".
6. The reservoir conditions are known to be difficult on the reliability of the MWD tools. The reservoir temperatures exceed 330°F and vibrations from drilling through natural fractures cause MWD tool sensors to fail during the final segment of drilling the lateral.

7. Without the MWD sensors operating, shot points can not be taken, leaving the operators to only drill an additional 200 feet from the point of failure to be in compliance with Statewide Rule 11.
8. BBX has experienced a 60% MWD tool failure rate during the drilling of the last five wells.
9. The termination of drilling operations prior to reaching TD will cause reserves to be left behind and cause waste.
10. Attempting to replace the MWD tool and drilling the last 300 to 500 feet is uneconomic and risks the well as tools may become stuck during the 19,000 foot workover operation.

**CONCLUSIONS OF LAW**

1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.
2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.
3. Approval of the requested Field Rule 2 amendment allowing an exception to Statewide Rule 11 for wells in the Magnolia Springs (Austin Chalk) Field, Jasper and Newton Counties, Texas will not cause waste or harm correlative rights.

**EXAMINER'S RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission amend the field rules for the Magnolia Springs (Austin Chalk) Field as proposed by BBX Operating, LLC.

Respectfully submitted;

Andres J. Trevino, P.E.  
Technical Examiner