

**THE APPLICATION OF ANADARKO PETROLEUM CORPORATION TO AMEND FIELD RULES FOR THE SANDBAR (BONE SPRING) FIELD, LOVING COUNTY, TEXAS**

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**HEARD BY:** Donna K. Chandler on February 7, 2011

**APPEARANCES:**

AnaMaria Marsland-Griffith  
David Christian

Chris Spencer

**REPRESENTING:**

Anadarko Petroleum Corporation

Chesapeake Operating Inc.

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Field rules for the Sandbar (Bone Spring) Field were adopted in Final Order No. 08-0267638, effective November 30, 2010. The rules in effect for the field are summarized as follows:

1. Designation of the field as the correlative interval from 8,007 feet to 11,067 feet as shown on the log of the Sandbar 53-2-39 Well No. 1;
2. 467'-933' lease line spacing, with no minimum between well spacing requirement between horizontal and vertical wells; take point language; box rule; NPZ provisions;
3. 320 acre oil units with provisions for additional acreage assignment based on length of drainhole;
4. Allocation based on 95% and 5% per well.

Anadarko requests that the rules be amended to apply to gas wells, with a classification of associated-prorated for the gas field, with a two-factor allocation formula and AOF status for the gas field. Anadarko also requests that oil wells in the field be assigned unlimited net gas-oil ratio authority. Additionally, Anadarko requests that the rules provide for off-lease penetration points for horizontal wells.

The application was unopposed and the examiner recommends that the field rules be amended as proposed by Anadarko.

### **DISCUSSION OF EVIDENCE**

The Sandbar (Bone Spring) Field was discovered upon completion of the Johnson 53-3-34 Well No. 1 by Anadarko in April 2010. The well was classified as an oil well. Field rules for the field were adopted effective November 30, 2010.

In August 2010, Anadarko completed its Bullhead 55-1-41 No. 1H as a gas well. The well has been tested and is currently shut-in. In September 2010, Anadarko tested its Sevengills 54-2-7 Well No. 1H and it will also be classified as a gas well. It is shut-in waiting on a pipeline connection. The completions to date are scattered over many miles.

All three completions in the field to date are horizontal wells and at least two more horizontal wells are permitted for the field. Anadarko requests that the spacing and density rule previously adopted for oil wells be applied to gas wells in the field. There is no evidence that there is a gas cap in the field. The permeability is so low that hydrocarbons can only be produced by fracture stimulation. There is no way to predict whether wells will be classified as oil wells or gas wells. On this basis, Anadarko requests that the gas field be classified as associated-prorated, with AOF status. In conjunction with this request, Anadarko requests that casinghead gas limits be removed for wells which are classified as oil wells.

Anadarko requests that the field rules include a provision for off-lease penetration points for horizontal wells. This provision will allow penetration points to be located off-lease, after notice to mineral owners of the offsetting lease. This provision will result in maximum length of horizontal drainholes, thereby increasing ultimate recovery.

All of the rules proposed by Anadarko for the Sandbar (Bone Spring) Field are commonly adopted for tight reservoirs.

### **FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. Field rules for the Sandbar (Bone Spring) Field were adopted in Final Order No. 08-0267638, effective November 30, 2010.
3. Field rules for the field provide for a designated interval, 467'-933' lease line spacing, with no minimum between well spacing requirement between horizontal and vertical wells; take point language; box rule; NPZ provisions;

320 acre oil units with provisions for additional acreage assignment based on length of drainhole, and allocation based on 95% and 5% per well.

4. The subject field was discovered in April 2010. The discovery well was classified as an oil well. Anadarko's two recent wells are classified as gas wells.
5. All three completions in the field to date are horizontal wells and at least two more horizontal wells are permitted for the field.
6. Because there is no way to predict whether wells will be classified as oil wells or gas wells, the same density rule should apply to oil and gas wells.
7. The gas field should be classified-prorated because there is no evidence of a gas cap in the field.
8. There is a market for all gas produced from the field.
9. Because gas wells are allowed to produce at AOF, elimination of the casinghead gas limit for oil wells is appropriate.
10. Off-lease penetration points for horizontal wells will allow maximum length of horizontal drainholes, thereby increasing ultimate recovery.

**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 Sandbar (Bone Spring) Field is necessary to prevent waste, protect correlative rights and promote development of the field.

**RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that the field rules for the Sandbar (Bone Spring) Field be amended as proposed by Anadarko.

Respectfully submitted,

Donna K. Chandler  
Technical Examiner