### THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE ALLISON-BRITT (12350) FIELD, WHEELER COUNTY, TEXAS

Heard by: Donna K. Chandler on July 1, 2009

#### Appearances:

### **Representing:**

Glenn Johnson Jim Clark Bill Spencer Chesapeake Operating, Inc.

Carey P. Holtzendorf

Pogo Producing Company, LLC

## EXAMINER'S REPORT AND RECOMMENDATION

## STATEMENT OF THE CASE

Field rules for the Allison-Britt (12350) Field were adopted in Final Order No. 10-77,485, effective January 18, 1982 and amended in Final Order No. 10-0250120, effective March 29, 2007. The rules in effect are summarized as follows:

- 1. Designation of the field as the correlative interval from 11,860 feet to 15,182 feet as shown on the log of the Grayson Well No. 1-32;
- 2. 933'-1,867' well spacing;
- 3. 320/optional 160 acre gas density rules;
- 4. Allocation based on 95% deliverability/5% per well, with AOF status.

Chesapeake requests that the rules for the field be amended as follows:

- 1. No change;
- 2. 467'-660' well spacing for horizontal and vertical wells, with no limitation between vertical and horizontal wells; special language for "take points" in horizontal wells;
- 3. Special provisions for stacked lateral wells;
- 4. No change in density provision

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5. No change in allocation formula or AOF status.

The application was unprotested and the examiner recommends that the field rules for the Allison-Britt (12350) Field be amended as proposed by Chesapeake.

#### DISCUSSION OF EVIDENCE

The Allison-Britt (12350) Field was discovered in 1979. The field is designated as an associated field with AOF status. There are currently 65 gas wells and 2 oil wells in the field. Cumulative production from the field is 49 BCF of gas and 1.6 million BC. The current correlative interval for the field is from the base of the Marmaton to the top of the 13 Fingers, and includes the Granite Wash and Atoka.

The designated interval for the field is over 3,000 feet thick and includes many separate pay zones. Operators are currently developing the field with horizontal wellbores. To accommodate horizontal drilling, Chesapeake requests that a field rule be adopted which includes language relevant to measurement of distances to lease lines for horizontal drainhole wells. Chesapeake's proposed rule specifies that, for purposes of lease line and between-well spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well. Similar rules have been adopted in several other Granite Wash Fields.

The proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 467 feet to a lease line, as long as no take-point is closer than 467 feet to any lease line. Horizontal drainhole length on a lease is then maximized, resulting in additional recovery of gas.

The evidence indicates that an effective lateral gain length of 324 feet could be obtained by moving the penetration point closer to the lease line. Chesapeake estimates an average gas recovery of 1,500 MCF per lateral foot of drainhole for Granite Wash reservoirs. Therefore, the 324 feet of lateral gain length will result in the recovery of an additional 486 MMCF per horizontal drainhole. For purposes of assignment of additional acreage pursuant to Rule 86, it is proposed that the distance between the first and last take-point in a horizontal well be used.

It is also requested that spacing rules for the field be adopted to accommodate the drilling of stacked horizontal lateral wells. Given the thickness of the field interval, Chesapeake believes that several separate laterals may be necessary to effectively develop the reservoir with horizontal wells. Similar stacked lateral rules have already been adopted in several Granite Wash fields in the area, as well as in the Newark, East (Barnett Shale) Field. The rule would allow stacked horizontal laterals within the Granite Wash

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correlative interval that are drilled from different wellbores to be considered a single well for regulatory purposes. It is proposed that a stacked lateral be defined to be multiple horizontal drainholes which are drilled (1) from different surface locations on the same lease unit no more than 250 feet from each other at the surface and (2) no more than 300 feet from each other in a horizontal plane within the correlative interval.

# FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Allison-Britt (12350) Field is an associated field which operates under rules 933'-1,867 well spacing, 320/optional 160 acre gas rules and allocation based on 95% deliverability and 5% pr well. The allocation formula is currently suspended.
- 3. The Allison-Britt (12350) Field was discovered in 1979 and there are currently 65 gas wells and 2 oil wells carried on the proration schedule.
- 4. A spacing rule which utilizes "take-points" in a horizontal well for determination of distances to lease lines will prevent waste and will not harm correlative rights.
  - a. The Granite Wash is a tight formation and is not commercially productive unless fracture-stimulated.
  - b. A take-point in a horizontal well in this field may be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased portion of the wellbore.
  - c. Adoption of the proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 467 feet to a lease line, as long as no take-point is closer than 467 feet to any lease line.
  - d. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
  - e. Allowing the penetration point closer to the lease line, an effective lateral gain length of 324 feet can be obtained, which will result in the recovery of an additional 486 MMCF per horizontal drainhole.

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- 5. The proposed minimum lease line spacing of 467 feet and minimum spacing of 660 feet between wells, with no limitation between horizontal and vertical wells, will provide flexibility in developing the field.
- 6. The proposed "stacked lateral" rule for the Allison-Britt (12350) Field will allow stacked horizontal laterals within the Granite Wash correlative interval that are drilled from different wellbores to be considered a single well for regulatory purposes.
- 7. For purposes of assignment of additional acreage pursuant to Rule 86, the distance between the first and last take-point in a horizontal well should be used.

# 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 Allison-Britt (12350) 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 Commission amend the field rules for the Allison-Britt (12350)Field as proposed by Chesapeake Operating, Inc.

Respectfully submitted,

Donna K. Chandler Technical Examiner