### **OIL AND GAS DOCKET NO. 10-0262312**

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE FELDMAN (TONKAWA) FIELD, HEMPHILL AND LIPSCOMB COUNTIES, TEXAS

#### **OIL AND GAS DOCKET NO. 10-0262316**

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE SPARKS (TONKAWA) FIELD, HEMPHILL AND LIPSCOMB COUNTIES, TEXAS

**HEARD BY:** Richard D. Atkins, P.E. - Technical Examiner

**HEARING DATE:** August 14, 2009

APPEARANCES: REPRESENTING:

Glenn E. Johnson James M. Clark Chesapeake Operating, Inc.

## **EXAMINER'S REPORT AND RECOMMENDATION**

#### STATEMENT OF THE CASE

Field rules for the Feldman (Tonkawa) Field were originally adopted in Docket No. 10-47,665, effective February 1, 1962. The rules currently in effect for the field are summarized as follows:

- 1. 660'-1,320' well spacing for oil wells and 1,320'-2,640' well spacing for gas wells;
- 2. 160 acre oil units and 640 acre gas units;
- 3. Allocation based on 100% acres with multiple 49b allocation for gas wells.

Field rules for the Sparks (Tonkawa) Field were originally adopted in Docket No. 10-56,830, effective November 3, 1966. The rules currently in effect for the field are summarized as follows:

- 1. 660'-1,320' well spacing;
- 2. 160 acre proration units;
- 3. Allocation based on 100% acres.

Chesapeake Operating, Inc. ("Chesapeake") requests that the Field Rules for both fields be amended to provide for a correlative interval, 467' lease line spacing and 660' well spacing between vertical to vertical wells and horizontal to horizontal wells with no between well spacing between vertical and horizontal wells and include a special provision that distances for horizontal wells be based on the closest "take point" in a horizontal well. Chesapeake had also requested off-lease penetration points with proper notice, but withdrew this request at the call of the hearing.

Information included in the record of the hearing suggested to the examiner that it would be appropriate for the Commission to consolidate the Sparks (Tonkawa) Field into the Feldman (Tonkawa) Field. Chesapeake did not consider this to be adverse and the other operators were notified and did not protest this recommendation.

The application was unprotested and the examiner recommends that the Sparks (Tonkawa) Field be consolidated into the Feldman (Tonkawa) Field and that Field Rules for the Feldman (Tonkawa) Field be amended, as proposed by Chesapeake.

#### **DISCUSSION OF EVIDENCE**

The Feldman (Tonkawa) Field was discovered in April 1957. The field is classified as an associated 49-b field with 10 gas wells and 22 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 51.6 BCFG and 4.3 MMBO.

The Sparks (Tonkawa) Field was discovered in August 1965. The field is classified as an associated field with no gas wells and 11 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 6.9 BCFG and 741.1 MBO.

The two fields produce from a correlative Tonkawa interval at about 7,650 feet. Over the years, the two fields have "grown together". The fields overlap and consolidating the Sparks (Tonkawa) Field into the Feldman (Tonkawa) Field will eliminate unnecessary paperwork and aid in the proration of the fields by creating a single field. Chesapeake requests that the correlative interval from 7,606 feet to 7,652 feet as shown on the log of the Mobil Producing TX & NM, Inc. - Olive T. Jones Lease, Well No. 3 (API No. 42-295-80377), Lipscomb County, Texas, be considered as the designated interval for the consolidated Feldman (Tonkawa) Field.

Operators will be developing the Feldman (Tonkawa) Field with horizontal wellbores.

The proposed well spacing of 467 feet from lease lines and 660 feet between wells with the elimination of a minimum spacing between horizontal and vertical wells will accommodate horizontal drilling and allow operators to maximize drainhole length.

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 many Granite Wash fields in the area, including the Hemphill (Granite Wash) and Mendota, NW. (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 the additional recovery of gas.

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.

## FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Feldman (Tonkawa) Field was discovered in April 1957. The field is classified as an associated 49-b field with 10 gas wells and 22 oil wells carried on the proration schedules.
- 3. The Sparks (Tonkawa) Field was discovered in August 1965. The field is classified as an associated field with no gas wells and 11 oil wells carried on the proration schedules.
- 4. The two fields produce from a correlative Tonkawa interval at about 7,650 feet. Over the years, the two fields have "grown together". The fields overlap and consolidating the Sparks (Tonkawa) Field into the Feldman (Tonkawa) Field will eliminate unnecessary paperwork and aid in the proration of the fields by creating a single field.
- 5. The designated interval for the consolidated Feldman (Tonkawa) Field is the correlative interval from 7,606 feet to 7,652 feet as shown on the log of the

Mobil Producing TX & NM, Inc. - Olive T. Jones Lease, Well No. 3 (API No. 42-295-80377), Lipscomb County, Texas.

- 6. Operators will be developing the Feldman (Tonkawa) Field with horizontal wellbores. The proposed well spacing of 467 feet from lease lines and 660 feet between wells with the elimination of a minimum spacing between horizontal and vertical wells will accommodate horizontal drilling and allow operators to maximize drainhole length.
- 7. 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 Tonkawa formation is a tight formation and horizontal wells will increase the recovery of reserves from the reservoir.
  - 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.
- 8. 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. Consolidating the Sparks (Tonkawa) Field into the Feldman (Tonkawa) Field and amending the Field Rules for the Feldman (Tonkawa) Field is necessary

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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 consolidate the Sparks (Tonkawa) Field into the Feldman (Tonkawa) Field and amend the Field Rules for the Feldman (Tonkawa) Field, as proposed by Chesapeake.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner