THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE KIOWA CREEK (CLEVELAND) FIELD, LIPSCOMB AND OCHILTREE COUNTIES, TEXAS

OIL AND GAS DOCKET NO. 10-0262314

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE PEERY, N. (CLEVELAND) FIELD, LIPSCOMB COUNTY, TEXAS

OIL AND GAS DOCKET NO. 10-0262315

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE WARREN (CLEVELAND) FIELD, LIPSCOMB COUNTY, TEXAS

OIL AND GAS DOCKET NO. 10-0262317

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE LIPSCOMB (CLEVELAND) FIELD, LIPSCOMB COUNTY, TEXAS

OIL AND GAS DOCKET NO. 10-0262318

THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO AMEND FIELD RULES FOR THE LIPSCOMB, S. W. (CLEVELAND) FIELD, LIPSCOMB COUNTY, TEXAS

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

**HEARING DATE:** August 14, 2009

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### APPEARANCES: REPRESENTING:

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

### STATEMENT OF THE CASE

Field rules for the Kiowa Creek (Cleveland) Field were originally adopted in Docket No. 10-74,352, effective February 1, 1980, as amended. The rules currently in effect for the field are summarized as follows:

- Designated correlative interval;
- 2. 467'-933' well spacing;
- 3. 160 acre oil and gas units;
- 4. Allocation based on 100% acres with AOF status.

The Peery, N. and Warren (Cleveland) Fields currently operate under Statewide Rules.

Field rules for the Lipscomb (Cleveland) Field were originally adopted in Docket No. 10-0207563, effective March 14, 1995. The rules currently in effect for the field are summarized as follows:

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- Designated correlative interval;
- 2. 467'-1,200' oil well spacing and 660'-1,320' gas well spacing;
- 3. 40 acre oil units and 320 acre gas units;
- 4. Allocation based on 50% acres and 50% deliverability with AOF status.

Field rules for the Lipscomb, S. W. (Cleveland) Field were originally adopted in Docket No. 10-71,004, effective March 1, 1979, as amended. The rules currently in effect for the field are summarized as follows:

- 1. Designated correlative interval;
- 2. 467'-1,200' oil well spacing and 660'-1,320' gas well spacing;
- 3. 40 acre oil units and 640 acre gas units with optional 160 acre gas units;
- 4. Allocation based on 50% acres and 50% deliverability with AOF status.

Chesapeake Operating, Inc. ("Chesapeake") requests that the Field Rules for the subject fields be amended to provide for a correlative interval for the Peery, N. and Warren (Cleveland) Fields, 467'-933' well spacing with no between well spacing between vertical and horizontal wells, include a special provision that distances for horizontal wells be based on the closest "take point" in a horizontal well and adopt an oil allowable allocation formula for the Lipscomb and Lipscomb, S. W. (Cleveland) Fields. Chesapeake also requests that the filing of P-15's and plats not be required as long as the fields are 100% AOF and the allocation formula in the fields remain suspended. Chesapeake had also requested offlease penetration points with proper notice, but withdrew this request at the call of the hearing.

The applications were unprotested and the examiner recommends that the Field Rules for the subject fields be amended, as proposed by Chesapeake.

#### **DISCUSSION OF EVIDENCE**

The Kiowa Creek (Cleveland) Field was discovered in December 1960. The field is classified as an associated field with 20 gas wells and 13 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 14.5 BCFG and 451.4 MBO.

The Peery, N. (Cleveland) Field was discovered in October 1964. The field is classified as an associated field with 2 gas wells and 1 oil well carried on the proration schedules. Cumulative production from the field through June 2009 is 3.3 BCFG and 47.5 MBO.

The Warren (Cleveland) Field was discovered in April 1983. The field is classified as an associated field with 1 gas well and 2 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 0.9 BCFG and 92.4 MBO.

The Lipscomb (Cleveland) Field was discovered in May 1958. The field is classified as an associated field with 110 gas wells and 68 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 70.7 BCFG and 2.9 MMBO.

The Lipscomb, S. W. (Cleveland) Field was discovered in January 1975. The field is classified as an associated field with 145 gas wells and 5 oil wells carried on the proration schedules. Cumulative production from the field through June 2009 is 98.3 BCFG and 513.9 MBO.

Chesapeake requests that the correlative interval from 7,322 feet to 7,420 feet as shown on the log of the Chesapeake Operating, Inc. - Guy Lease, Well No. 5821 (API No. 42-295-00231), Lipscomb County, Texas, be considered as the designated interval for the Peery, N. (Cleveland) Field. In addition, Chesapeake requests that the correlative interval from 7,180 feet to 7,204 feet as shown on the log of the G. & S., Inc. - D. E. Roberts Lease, Well No. 1 (API No. 42-295-31230), Lipscomb County, Texas, be considered as the designated interval for the Warren (Cleveland) Field.

Operators will be developing the subject fields with horizontal wellbores. The proposed well spacing of 467' from lease lines and 933' 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 other tight reservoirs, including the Barnett Shale, Cotton Valley and Granite Wash.

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, it is proposed that the distance between the first and last take-point in a horizontal well be used.

Chesapeake requests that an oil allowable allocation formula be adopted for the Lipscomb and Lipscomb, S. W. (Cleveland) Fields based on 50% acres and 50% potential. Chesapeake also requests that the filing of P-15's and plats not be required, as long as the fields have 100% AOF status. Since the allocation formulas are suspended, this request will eliminate unnecessary paperwork.

### **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Kiowa Creek (Cleveland) Field was discovered in December 1960. The field is classified as an associated field with 20 gas wells and 13 oil wells carried on the proration schedules.
- 3. The Peery, N. (Cleveland) Field was discovered in October 1964. The field is classified as an associated field with 2 gas wells and 1 oil well carried on the proration schedules.
- 4. The Warren (Cleveland) Field was discovered in April 1983. The field is classified as an associated field with 1 gas well and 2 oil wells carried on the proration schedules.
- 5. The Lipscomb (Cleveland) Field was discovered in May 1958. The field is classified as an associated field with 110 gas wells and 68 oil wells carried on the proration schedules.
- 6. The Lipscomb, S. W. (Cleveland) Field was discovered in January 1975. The field is classified as an associated field with 145 gas wells and 5 oil wells carried on the proration schedules.

- 7. The designated interval for the Peery, N. (Cleveland) Field is the correlative interval from 7,322 feet to 7,420 feet as shown on the log of the Chesapeake Operating, Inc. Guy Lease, Well No. 5821 (API No. 42-295-00231), Lipscomb County, Texas.
- The designated interval for the Warren (Cleveland) Field is the correlative interval from 7,180 feet to 7,204 feet as shown on the log of the G. & S., Inc. D. E. Roberts Lease, Well No. 1 (API No. 42-295-31230), Lipscomb County, Texas.
- 9. Operators will be developing the subject fields with horizontal wellbores. The proposed well spacing of 467' from lease lines and 933' 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.
- 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 Cleveland 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.
- 11. For purposes of assignment of additional acreage, the distance between the first and last take-point in a horizontal well should be used.
- 12. An oil allowable allocation formula based on 50% acres and 50% potential for the Lipscomb and Lipscomb, S. W. (Cleveland) Fields will protect correlative rights and satisfy statutory requirements.

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13. Continued suspension of the allocation formulas are appropriate, as there is a 100% market for all the gas produced.

## **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 subject fields 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 subject fields, as proposed by Chesapeake.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner