

**OIL AND GAS DOCKET NO. 10-0258183**

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**THE APPLICATION OF CIMAREX ENERGY CO. TO AMEND THE FIELD RULES FOR THE RED DEER CREEK (GRANITE WASH) FIELD, HEMPHILL AND ROBERTS COUNTIES, TEXAS**

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**Heard by:** Richard D. Atkins, P.E. - Technical Examiner

**Hearing Date:** August 20, 2008

**Appearances:**

**Representing:**

Philip Whitworth  
Davin McGinnis  
Kevin Smith  
Chris Carson  
Jennifer Hellman

Cimarex Energy Co.

Sandra Bolz Buch

Devon Energy Production Co., LP

James M. Clark

Samson Lone Star, LLC

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Field rules for the Red Deer Creek (Granite Wash) Field are summarized as follows:

1. Designation of the field as the correlative interval from 8,470 feet to 10,615 feet as shown on the log of the Marion Osborn Lease, Well No. 2026;
2. 467'-467' well spacing;
3. 160 acre gas units with optional 40 acre units;
4. Allocation based on 75% acreage and 25% deliverability.

Cimarex Energy Co. requests that the rules be amended to include a special provision that distances for horizontal wells be based on the closest "take point" in a horizontal well.

The application was unopposed and the examiner recommends that the field rules for the Red Deer Creek (Granite Wash) Field be amended as proposed by Cimarex.

### **DISCUSSION OF EVIDENCE**

The Red Deer Creek (Granite Wash) Field was discovered in March 1978. The field is an associated gas field with 103 gas wells carried on the proration schedule. The allocation formula is currently suspended. Cumulative production from the field through April 2008 is 42.6 BCFG and 489.4 MBO.

Operators are currently developing the field with horizontal wellbores. Cimarex requests that a field rule be adopted which includes language relevant to measurement of distances to lease lines for horizontal drainhole wells. Cimarex'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 and Cotton Valley Sand 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.

Cimarex stated that an effective lateral gain length of 387 feet could be obtained by moving the penetration point closer to the lease line. Cimarex studied 26 horizontal Granite Wash wells in the area and calculated an average gas recovery of 700 MCFG per lateral foot of drainhole. Therefore, the 387 feet of lateral gain length will result in the recovery of an additional 270 MMCFG 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.

### **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 Red Deer Creek (Granite Wash) Field provide for a designated interval, 467'-467' well spacing and 160 acre gas units with optional 40 acre units.
3. The Red Deer Creek (Granite Wash) Field was discovered in March 1978. The field is an associated gas field with 103 gas wells carried on the proration schedule and is actively being developed with horizontal drainhole wells.
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.
5. By moving the penetration point closer to the lease line, an effective lateral gain length of 387 feet can be obtained, which will result in the recovery of an additional 270 MMCFG per horizontal drainhole.
6. 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 Red Deer Creek (Granite Wash) 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 Red Deer Creek (Granite Wash) Field as proposed by Cimarex.

Respectfully submitted,

Richard D. Atkins, P.E.  
Technical Examiner