

**OIL AND GAS DOCKET NO. 10-0267715**

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**THE APPLICATION OF SANGUINE GAS EXPLORATION, LLC TO AMEND FIELD RULE NO. 2 FOR THE MILLS RANCH (GRANITE WASH CONS.) FIELD, WHEELER COUNTY, TEXAS**

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

**DATE OF HEARING:** November 5, 2010

**APPEARANCES:** **REPRESENTING:**

**APPLICANT:**

Wayman Gore  
Mark Hanna

Sanguine Gas Exploration, LLC

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Field Rules for the Mills Ranch (Granite Wash Cons.) Field were originally adopted in Final Order No. 10-0261739, effective February 23, 2010. The Field Rules currently in effect for the field are summarized as follows:

1. Correlative interval from 10,297 feet to 11,512 feet as shown on the log of the Sallie Lease, Well No. 505 (API No. 42-483-32819);
2. 467'-0' well spacing;
3. 160 acre units with optional 20 acre density;
4. Allocation based on 95% acres and 5% per potential/deliverability, with AOF status.

Sanguine Gas Exploration, LLC ("Sanguine") requests that Field Rule No. 2 be amended to provide special provisions for "take points" and an "off-lease" penetration point for horizontal drainhole wells.

The application was unopposed and the examiner recommends that Field Rule No. 2 for the Mills Ranch (Granite Wash Cons.) Field be amended, as proposed by Sanguine.

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### **DISCUSSION OF EVIDENCE**

The Mills Ranch (Granite Wash Cons.) Field was created in February 2010 by the consolidation of the Mills Ranch (Granite Wash) and Mills Ranch (Granite Wash K.C.) Fields. The field is an associated oil field with 44 producing oil wells and 3 producing gas wells carried on the proration schedules. The allocation formula is currently suspended. Cumulative production from the field through August 2010 is 4.1 MMBO and 15.5 BCFG.

Sanguine is proposing to drill additional horizontal wells and requests horizontal rules in order to promote the efficient and effective development of the remaining hydrocarbons. Sanguine requests that Field Rule No. 2 be amended to include language relevant to measurement of distances to lease lines for horizontal drainhole wells. Sanguine'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. 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.

In some cases, it is beneficial to penetrate the reservoir off lease, while still having "take points" no closer to lease lines than allowed under the field rules. Sanguine requests that Field Rule No. 2 also be amended for the subject field to provide for an off-lease penetration point. Statewide Rule 86 requires that the penetration point of a horizontal drainhole be on the lease. In this field, a well generally requires approximately 600 feet to 800 feet of horizontal displacement to make the 90 degree turn from vertical to horizontal. The proposed rule would allow operators to drill horizontal wells with the penetration point, as defined by Rule 86, off of the lease, as long as no take-point is closer than 467 feet to any lease line. Sanguine proposes that an offsite penetration point be allowed after notice to the mineral owners of the off-lease tract on which the penetration point is to be located and if no protest is received.

If the penetration point is required to be on the lease, then the first point of production would be about 862 feet from the lease line. Since there is a 467' lease line spacing, the proposed rule will allow approximately 395 feet of additional producing lateral drainhole length. Sanguine calculated an average oil recovery of 196 BOE per lateral foot of drainhole. Therefore, the 395 feet of lateral gain length will result in the recovery of an additional 77.5 MBOE per horizontal drainhole well.

Similar rules have been adopted in other tight reservoirs, including the Stiles Ranch (Granite Wash Cons.) and Lott Ranch (Granite Wash Cons.) Fields, as well as, the Newark, East (Barnett Shale) Field.

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### FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Mills Ranch (Granite Wash Cons.) Field was created in February 2010 by the consolidation of the Mills Ranch (Granite Wash) and Mills Ranch (Granite Wash K.C.) Fields. The field is an associated oil field with 44 producing oil wells and 3 producing gas wells carried on the proration schedules.
3. Field rules for the Mills Ranch (Granite Wash Cons.) Field provide for a designated interval, 467'-0' well spacing, 160 acre units with optional 20 acre density and allocation based on 95% acres and 5% per potential or deliverability.
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 will allow the horizontal drainhole length on a lease to be maximized.
  - d. For purposes of assignment of additional acreage pursuant to Statewide Rule 86, the distance between the first and last take-point in a horizontal well should be used.
5. Allowing an off-lease penetration point will result in maximum producing drainhole length, thereby increasing ultimate recovery from horizontal drainhole wells.
  - a. The proposed rule will allow approximately an additional 395 feet of producing drainhole.
  - b. By moving the penetration point off-lease, an effective lateral gain length of 395 feet can be obtained, which will result in the recovery of

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an additional 77.5 MBOE per horizontal drainhole well.

- c. To protect correlative rights, prior notice and opportunity to object should be given to the mineral owners of offsite surface locations.

**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 Field Rule No. 2 for the Mills Ranch (Granite Wash Cons.) 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 Field Rule No. 2 for the Mills Ranch (Granite Wash Cons.) Field, as proposed by Sanguine.

Respectfully submitted,

Richard D. Atkins, P.E.  
Technical Examiner