

OIL AND GAS DOCKET NO. 10-0227471

**THE APPLICATION OF BRIGHAM OIL & GAS L.P. TO CONSIDER TEMPORARY
FIELD RULES FOR THE FULLER (HUNTON DEEP) FIELD, WHEELER COUNTY,
TEXAS**

Heard by: Donna K. Chandler, Technical Examiner

Hearing Date: May 16, 2001

Appearances:

Representing:

George Neale
Dick Schmidt
David Thetford
Ken Treaccar

Brigham Oil & Gas

Bill Spencer

Chesapeake Operating Inc.

John Soule

Leslie Nooncaster

Tom Weber

Mills Family

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Brigham Oil & Gas requests that temporary field rules be adopted for the Fuller (Hunton Deep) Field, Wheeler County.

The proposed rules are as follows:

1. Designation of the field as the correlative interval from 22,646 feet to 25,060 feet as shown on the log of the Mills Ranch No. 1-97S;
2. 1,867'-3,735' well spacing;
3. 640 acre units plus 10% tolerance and a maximum diagonal of 8,500 feet;
4. Allocation based on 75% acreage and 25% deliverability.

This application was unopposed and the examiner recommends adoption of the proposed rules on a temporary basis, subject to review in 18 months. This hearing was originally docketed as

an application for new field designation and field rules. The new field designation was separated and heard under Docket No. 10-0228359. These field rules had originally been protested but all protests were withdrawn prior to the hearing. This field rules application will be considered by the Commission on the same date as the new field designation.

DISCUSSION OF EVIDENCE

The Mills Ranch No. 1-97S was completed in January 2001 by Brigham Oil & Gas L.P. The well was a re-entry of the 1-97 drilled in 1981. The original well encountered a fault and was not drilled deep enough to penetrate the Hunton. The sidetrack encountered the top of the Hunton at approximately 22,650 feet (MD) and the well is perforated in several intervals between 22,650 and 24,960 feet. On initial test, the Mills Ranch No. 1-97S produced at a rate of 8,847 MCFD. The well currently produces approximately 7,000 MCFD.

The nearest analogous field is the Fuller (Hunton, Lo) Field across a fault to the east approximately one mile. The Mills Ranch No. 1-98 has produced over 15 BCF and 178,000 BC from the Fuller (Hunton, Lo) Field through February 2001. Current production from the 1-98 well is approximately 1,500 MCFD. Estimated ultimate recovery from the 1-98 well is 20.3 BCF of gas.

The Hunton in the Mills Ranch No. 1-98 has average porosity of 4% and average water saturation is 33%. Net pay in this well is 70 feet. The calculated drainage area for the No. 1-98 is 884 acres based on the 20.3 BCF ultimate recovery. The Hunton in the 1-97S has average porosity of 4% and average water saturation is 15%. The net pay in the 1-97S is 240 feet. Recoverable gas beneath 640 acres beneath the 1-97S well is estimated to be 67 BCF.

Brigham requests a 640 acre density rule for the Fuller (Hunton Deep) Field. Brigham expects the No. 1-97S well to drain as large an area as the 1-98 well in the adjacent Hunton Field. In addition, six other Hunton fields in the area operate under 640 acre rules.

A two factor allocation formula is necessary for the proposed interval to be considered a single field. Brigham proposes 75% acreage and 25% deliverability.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. The Mills Ranch No. 1-97S was completed in January 2001 by Brigham Oil & Gas L.P. with perforations in several intervals between 22,650 and 24,960 feet.
3. On initial test, the Mills Ranch No. 1-97S produced at a rate of 8,847 MCFD. Current production from the well is approximately 7,000 MCFD.

4. The Mills Ranch No. 1-97S can reasonably be expected to drain at least 640 acres.
 - a. The nearest analogous field is the Fuller (Hunton, Lo) Field across a fault to the east approximately one mile.
 - b. The Mills Ranch No. 1-98 has produced over 15 BCF and 178,000 BC from the Fuller (Hunton, Lo) Field and will ultimately drain 884 acres from 70 feet of pay.
 - c. The Hunton in the 1-97S has similar rock and producing characteristics to the No. 1-98 well.
 - d. 640 acre density is common for other Hunton fields in the area.
5. Well spacing a minimum of 1,867 feet from lease lines and 3,735 feet between wells is the standard spacing for 640 acre units.
6. Allocation based on 75% acreage and 25% deliverability is a reasonable method of allocation which will protect the correlative rights of mineral owners in the field and meets statutory requirements for combining multiple zones into a single field.

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. Adoption of the proposed field rules for the Fuller (Hunton Deep) Field on a temporary basis is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Commission adopt the field rules proposed by Brigham Oil & Gas for the Fuller (Hunton Deep) Field on a temporary basis, subject to review in 18 months.

Respectfully submitted,

Donna K. Chandler
Technical Examiner