

OIL AND GAS DOCKET NO. 04-0259990

THE APPLICATION OF BRIGHAM OIL & GAS, LP TO ADOPT PERMANENT FIELD RULES FOR THE HOME RUN (VICKSBURG10) FIELD, BROOKS COUNTY, TEXAS

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

HEARING DATE: January 7, 2009

APPEARANCES:

Richard Schmidt

REPRESENTING:

Brigham Oil & Gas, LP

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Brigham Oil & Gas, LP ("Brigham") requests that Permanent Field Rules be adopted for the Home Run (Vicksburg10) Field to provide for 330'-660' well spacing, 40 acre gas units with optional 20 acre density and allocation based on 5% acreage and 95% deliverability. Brigham also requests that the allocation formula in the field be suspended.

The application was unopposed and the examiner recommends that Permanent Field Rules for the subject field be adopted as proposed by Brigham.

DISCUSSION OF EVIDENCE

The Home Run (Vicksburg10) Field was discovered in February 2003 by the completion of the ExxonMobil - D. J. Sullivan State Lease, Well No. 8, through perforations from 12,933 feet to 13,500 feet. The well potential for 9.5 MMCFGPD and 589 BCPD. The gas gravity is 0.71 degree, the condensate gravity is 50.7 degree API and the GOR is 16,129 Cf/Bbl. The original bottomhole pressure was 12,800 psi and the bottomhole temperature is 307 degree F.

The Home Run (Vicksburg10) Field operates under Statewide Field Rules providing for 467'-1200' well spacing, 40 acre gas units and allocation based on 100% deliverability. Brigham and ExxonMobil are the only operators in the field and there are five producing wells and one shut-in well listed on the current proration schedule.

The subject field is a classic gulf coast field and was discovered based on 3-D seismic data. The structure is a northeast-southwest trending anticline bounded by parallel down-to-the-coast faults on the northwest and southeast. The field produces from the Vicksburg 9 and 10 sands. These sands are heterogeneous stacked fluvial sands that

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exhibit erratic and lenticular characteristics.

Brigham plans to drill additional wells and is requesting an optional 20 acre density. Brigham is also requesting 330'-660' well spacing in conjunction with the optional 20 acre density to allow for flexibility in selecting future drilling locations.

Brigham presented drainage area calculations for the six wells in the Home Run (Vicksburg10) Field. The six wells had an average porosity of 16%, an average water saturation of 50% and an average estimated recovery factor of 75%. The net pay ranged from 38 feet to 274 feet and the ultimate recoveries ranged from less than 320 MMCFG to over 10.5 BCFG. The calculated drainage areas for these wells ranged from 11 acres up to a maximum of 50 acres. The average drainage area was 23 acres.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. To satisfy State Statutes, Brigham proposed a two factor allocation formula based on 5% acreage and 95% deliverability. In addition, Brigham requested that the allocation formula be suspended, as there is a 100% market for all the gas produced from the field.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
2. The Home Run (Vicksburg10) Field was discovered in February 2003 by the completion of the ExxonMobil - D. J. Sullivan State Lease, Well No. 8, through perforations from 12,933 feet to 13,500 feet.
3. The field operates under Statewide Field Rules providing for 467'-1200' well spacing, 40 acre gas units and allocation based on 100% deliverability.
4. Brigham and ExxonMobil are the only operators in the field and there are five producing wells and one shut-in well listed on the current proration schedule.
5. The field produces from the Vicksburg 9 and 10 sands. These sands are heterogeneous stacked fluvial sands that exhibit erratic and lenticular characteristics.
6. Brigham is requesting 330'-660' well spacing in conjunction with optional 20 acre density to allow for flexibility in selecting future drilling locations.
7. The calculated drainage areas for the six wells in the Home Run

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(Vicksburg10) Field ranged from 11 acres up to a maximum of 50 acres. The average drainage area was 23 acres.

8. Allocation based on 5% acreage and 95% deliverability is a reasonable formula which will protect correlative rights.
9. Suspension of the allocation formula in the field is appropriate because there is a 100% market for any gas produced from the 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. Adopting Permanent Field Rules for the Home Run (Vicksburg10) Field is necessary to prevent waste, protect correlative rights and promote development of the field.
4. Suspension of the allocation formula is appropriate pursuant to Statewide Rule 31(j).

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission adopt Permanent Field Rules for the Home Run (Vicksburg10) Field as proposed by Brigham Oil & Gas, LP and that the allocation formula in the field be suspended.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner