

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

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

HEARING DATE: February 4, 2009

APPEARANCES:

REPRESENTING:

John S. Fontenot

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, South (Vicksburg) 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.

Since the field already has a two factor allocation formula of 5% per well and 95% deliverability, the examiner recommended that the existing formula remain unchanged. Brigham did not consider this to be adverse. The application was unopposed and the examiner recommends that Permanent Field Rules for the subject field be adopted as proposed by Brigham and that the allocation formula in the field be suspended.

DISCUSSION OF EVIDENCE

The Home Run, South (Vicksburg) Field was discovered in January 2004 by the completion of the ExxonMobil - D. J. Sullivan "F" Lease, Well No. 1, through perforations from 13,800 feet to 13,948 feet. The well potential for 7.9 MMCFGPD and 343 BCPD. The gas gravity is 0.72°, the condensate gravity is 54.9° API and the GOR is 23,094 Cf/Bbl. The original bottomhole pressure was 11,337 psi and the bottomhole temperature is 309°F.

The Home Run, South (Vicksburg) Field is classified as non-associated prorated and operates under Statewide Field Rules providing for 467'-1200' well spacing, 40 acre gas units and allocation based on 95% deliverability and 5% per well. Brigham and ExxonMobil are the only operators in the field and there are two producing wells listed on

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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 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. These same rules have been adopted in the two closest Vicksburg fields, the Home Run (Vicksburg Cons.) and Home Run (Vicksburg 10) Fields.

Brigham presented drainage area calculations for the two wells in the Home Run, South (Vicksburg) Field. The two 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 52 feet to 82 feet and the ultimate recoveries ranged from less than 323 MMCFG up to 670 MMCFG. The calculated drainage areas for these two wells was 6 acres and 11 acres with an average drainage area of 8 acres. Although the drainage areas for these two wells don't support 40 acre base units, Brigham believes that this is only a two well sampling, and based on the drainage area calculations of the two nearby Vicksburg fields, future wells could potentially drain up to 40 acres.

Brigham also requests 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, South (Vicksburg) Field was discovered in January 2004 by the completion of the ExxonMobil - D. J. Sullivan "F" Lease, Well No. 1, through perforations from 13,800 feet to 13,948 feet.
3. The field is classified as non-associated prorated and operates under Statewide Field Rules providing for 467'-1200' well spacing, 40 acre gas units and allocation based on 95% deliverability and 5% per well.
4. Brigham and ExxonMobil are the only operators in the field and there are two producing wells listed on the current proration schedule.
5. The field produces from the Vicksburg 9 and 10 sands. These sands are

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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 two wells in the Home Run, South (Vicksburg) Field was 6 acres and 11 acres with an average drainage area of 8 acres.
8. 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, South (Vicksburg) 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, South (Vicksburg) 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