OIL AND GAS DOCKET NO. 08-0268540

THE APPLICATION OF GRIFFIN PETROLEUM COMPANY TO AMEND FIELD RULES FOR THE YATES (SMITH SAND) FIELD, PECOS COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E., Technical Examiner

Hearing Date: January 13, 2010

Appearances:	**Representing:**
Greg Cloud	Griffin Petroleum Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

This is the unprotested application of Griffin Petroleum Company to amend the field rules as adopted in Oil and Gas Docket No. 8-22,318, issued effective July 9, 1937, as amended, for the Yates (Smith Sand) Field that currently provide for the following:

1. 330'-660' well spacing;

2. 10 acre oil units;

3. Allocation based on 100% acreage.

Griffin Petroleum Company requests that field rules be adopted as follows :

1. Designation of the field as the correlative interval from 712 feet to 784 feet as shown on the log of the Griffin Petroleum Company's Ashlee No. 2;

2. 150'-300' well spacing;

3. 10 acre density with a maximum diagonal of 1,100 feet, optional 5 acre units with a maximum diagonal of 600 feet;

4. Allocation based on 100% acreage (no change).

This application was unprotested and the examiner recommends that the field rules for the Yates (Smith Sand) Field be amended as requested.

DISCUSSION OF EVIDENCE

The Yates (Smith Sand) Field was discovered in 1937 at a depth of approximately 712 feet. Cumulative production from the field is approximately 4,631,990 BO. Currently there are 61 oil wells in the field. There are five operators in the field.

Griffin Petroleum requests the designated interval from 712 feet to 784 feet as shown on the log of the Griffin Petroleum Company's Ashlee No. 2 to be designated as the Yates (Smith Sand) Field. The interval includes the entire Smith Sand. The gross interval includes several fine grain sand sections with anhydrite streaks. The Smith Sand is bound by thick anhydrite sections above and below the Smith sand.

The Yates (Smith Sand) Field is characterized by Smith sand deposited on the both sides of the "Yates structural high". The western side of the field is more mature and depleted than the eastern side of the field. The western portion was drilled in the 1930's and waterflooded in the 1940's. The western area has produced 4.56 MMBO and wells are currently producing near their economic limit. Wells in the eastern portion of the field were drilled in the early to late 2000's. Two more recently completed wells in the field, the I.G. Yates "61" No. 2 (June 15, 2002) and the Ashlee No. 2 (December 8, 2004) demonstrate the need for additional drilling. The wells were selectively perforated, acid and fractured stimulated over a 14 to 54 foot gross interval. The wells potentialed between 14 and 40 BOPD each. Griffin Petroleum provided drainage calculations for the leases it operates. The drainage radius calculations demonstrate the need for smaller drilling units. The estimated drainage area for each well ranged from 2.3 to 8.2 acres. These calculations are based on a porosity of 19%, water saturation of 32%, net pay thickness of 29 feet and a recovery factor of 12.6%. The estimated ultimate recovery for the wells in the leases range from 8,317 to 29,838 BO.

Griffin Petroleum requests an optional 5 acre density and 300' between well spacing for the Yates (Smith Sand) Field so that it can place wells in optimum locations between existing producing wells and to prepare the field for possible future waterflood operations to efficiently produce the remaining hydrocarbons.

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. Special field rules for the Yates (Smith Sand) Field were adopted in Oil and Gas Docket No. 8-22,318, issued effective July 9, 1937, provide for 330'-660' well spacing, 10 acre oil units and allocation based on 100% acreage.

3. The Yates (Smith Sand) Field was discovered in 1937 and cumulative production from the field is approximately 4,631,990 BO.

4. The Yates (Smith Sand) Field produces from the Smith Sand, which is

bounded above and below with anhydrite. The designated interval from 712 feet to 784 feet as shown on the log of the Griffin Petroleum Company's Ashlee No. 2 should be designated as the Yates (Smith Sand) Field. The interval includes the entire Smith Sand.

5. Griffin Petroleum operates the eastern side of the field which is less mature and has not been waterflooded.

6. A density rule providing for 10/optional 5 acre units is appropriate for the field.

   a. The calculated drainage area for the five wells on the I.G. Yates "61" lease, is about 2.3 acres.

   b. The calculated drainage area for the thirteen wells on the Ashlee lease, is about 2.3 acres.

   c. The calculated drainage area for the four wells on the Leslie lease, is about 8.2 acres.

   d. The calculated drainage area for the six wells on the Ridge lease, is about 7.1 acres.

7. Development of the field on 5 acre density will allow the flexible placement of well locations between existing wells and to prepare the field for possible future waterflood operations to maximize recovery from the field.

8. The proposed 300' between well spacing will accommodate development on 5 acres.

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 field rules for the Yates (Smith Sand) Field is necessary to prevent waste and protect correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that field rules for the Yates (Smith Sand) Field be amended to provide for a correlative interval, optional 5 acre density and 150'-300' well spacing.

Respectfully submitted,

Andres J. Trevino, P.E.
Technical Examiner