

OIL AND GAS DOCKET NO. 02-0252720

THE APPLICATION OF PETROHAWK OPERATING COMPANY TO ADOPT FIELD RULES FOR THE FIFTEEN MILE CREEK (WILCOX) FIELD, GOLIAD COUNTY, TEXAS

Heard by: Donna K. Chandler on August 31, 2007

Appearances:

Carey Holtzendorf
David Klatt
Bob Tierney
Robert Berteau

Representing:

Petrohawk Operating Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Petrohawk Operating Company requests that field rules be adopted for the Fifteen Mile Creek (Wilcox) Field. The proposed rules are as follows:

1. Designation of the field as the correlative interval from 13,202 feet to 16,570 feet as shown on the log of the Parma No. 1;
2. 330'-660' well spacing;
3. 40 acre gas units with optional 20 acre units;
4. Allocation based on 95% deliverability and 5% per well with continued AOF status.

This application was unopposed and the examiner recommends approval of the field rules for the Fifteen Mile Creek (Wilcox) Field as requested by Petrohawk.

DISCUSSION OF THE EVIDENCE

The Fifteen Mile Creek (Wilcox) Field was discovered in 1981 at a depth of approximately 15,400 feet. The field is a non-associated gas field operating under Statewide Rules and AOF status.

A total of eight wells have been completed in the field and there are currently four active wells, two operated by Petrohawk Operating. Cumulative production from the field is 4.2 BCF of gas. Petrohawk's Parma No. 1 has produced 1.3 BCF since completion in August 2006.

Wells in the field had typically been completed in single Wilcox Sands within the proposed correlative interval. The discovery well for the field, the Harter No. 1, is only perforated from 15,370 feet to 15,440 feet. This well produced 545 MMCF of gas and was plugged in 1990. In early 2006, Petrohawk completed its Jacob No. 3 in the 14,900 Wilcox after testing in the 14,400 Wilcox interval. This well has produced 635 MMCF of gas. Later in 2006, Petrohawk completed its Parma No. 1. Five different Wilcox intervals were tested in this well and three intervals are currently producing: the 14,400, 15,800 and 16,500 Wilcox Sands.

The only interval which does not have a completion is the 13,300 Wilcox. The other four Wilcox sands within the proposed designated interval for the field have similar rock and fluid properties. All four are geo-pressured reservoirs with pressure gradients ranging from 0.7 to 0.9 psi/ft. Any cross-flow between zones will not harm the reservoirs.

Petrohawk estimates that the Jacob No. 3 will ultimately recover 650 MMCF of gas from the 14,900 Sand. With 13% porosity, 36% water saturation and 31 feet of pay, the calculated drainage area for the well is 22 acres. The Parma No. 1 is expected to ultimately recover 3 BCF of gas, 2 BCF from the 14,400 Sand and 1 BCF from the 15,800/16,500 Sands. The calculated drainage area for the 14,400 interval is 48 acres and the calculated drainage area for the lower sands is 17 acres. On this basis, Petrohawk believes that 40/optional 20 acre density is appropriate for future development of the five Wilcox Sands within the proposed designated interval.

Because the proposed field interval includes several separate sands, a two factor allocation formula is necessary. Petrohawk proposes that the allocation formula be based on 95% deliverability and 5% per well, with continued AOF status.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The Fifteen Mile Creek (Wilcox) Field was discovered in 1981 at a depth of approximately 15,400 feet. The field is a non-associated gas field operating under Statewide Rules and AOF status.

3. Cumulative production from eight completions in the field is 4.2 BCF of gas.
4. Early wells in the field were typically completed in single Wilcox Sands. More recent completions have tested up to five Wilcox sands within the proposed correlative interval.
5. All of the Wilcox sands within the proposed designated interval are geo-pressured with similar rock and fluid properties. Any cross-flow between zones will not harm the reservoirs.
6. Development of the field under 40 acre/optional 20 acre density is appropriate.
 - a. The Jacob No. 3 will ultimately recover 650 MMCF of gas and the calculated drainage area for the well is 22 acres.
 - b. The Parma No. 1 is expected to ultimately recover 2 BCF of gas from the 14,400 Sand and 1 BCF from the 15,800/16,500 Sands. The calculated drainage area for the 14,400 interval is 48 acres and the calculated drainage area for the lower sands is 17 acres.
7. Well spacing a minimum of 330 feet from lease lines and 660 feet between wells is the Commission's standard spacing for 20 acre density.
8. Allocation based on 95% deliverability and 5% per well is a reasonable formula which meets statutory requirements.
9. The Fifteen Mile Creek (Wilcox) Field should be designated as the correlative interval from 13,302 feet to 16,570 feet as shown on the log of the Parma No. 1. This interval includes several separate Wilcox intervals.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Adopting field rules for the Fifteen Mile Creek (Wilcox) Field is necessary to prevent waste, protect correlative rights, and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that field rules for the Fifteen Mile Creek (Wilcox) Field be adopted as proposed by Petrohawk, with continued AOF status.

Respectfully submitted,

Donna K. Chandler
Technical Hearings Examiner