OIL AND GAS DOCKET NO. 08-0233479

THE APPLICATION OF GRIFFEN PETROLEUM COMPANY FOR PERMANENT FIELD RULES FOR THE WHEAT (CHERRY CANYON) FIELD, LOVING COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: January 8, 2003
Hearing held: February 13, 2003

Appearances

	Representing
Bill Black	Griffen Petroleum Company
David Griffen	

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

The permanent field rules that Griffen Petroleum is proposing for the Wheat (Cherry Canyon) Field are summarized as follows:

1. Designated interval from 5300' to 6410' as shown on the log of the Chevron Oil Company J.G. Allen Lease Well No. 15;

2. 330-933 foot well spacing;

3. 40 acre proration units with 20 acre optional units; and

4. Allocation based on acreage.

The examiner suggested that the between-well spacing be 660' and that a two-factor allocation formula based 95% on acreage and 5% per well be adopted. The applicant had no objection to these recommendations.

DISCUSSION OF THE EVIDENCE

The Wheat (Cherry Canyon) Field was discovered in 1979, and has 42 producing wells, four injection wells and four temporarily abandoned wells. There are four operators in addition to Griffen which has one well. Griffen Petroleum Company which completed its first well in December, 2002, with an initial potential of 19 BO, 49 MCF and 302 BWPD. The field has been developed under Statewide Rules and the top allowable is 111 BOPD. Cumulative production is 2.2 million barrels and 5 BCF of gas; and the current water cut is 94%.

The Cherry Canyon Formation is a thick sequence of sandstones and shales, which the applicant has divided into several productive sandstone lenses. The producing lenses are laterally discontinuous which reduces the average drainage area. The Cherry Canyon extends from 5300' to 6410 as shown on the log of the Chevron J.G. Allen Well No. 15. It is overlain by the productive Bell Canyon and underlain by the Brushy Canyon Formation. Porosity is 18.6% and the water saturation is 62% as measured in logs.

The Wheat Field produces from the Bell Canyon and has had 20 acre density since 1963. The lithology of the Bell Canyon in the Wheat Field is similar to that of the Wheat (Cherry Canyon) reservoir. A structure map shows that the Wheat (Cherry Canyon) Field is located on a structural nose but the trap is largely stratigraphic.

The six wells on Wheeler Energy's Johnson, W.D., Jr. -F- Lease have already produced 600,000 barrels of oil and their total ultimate recovery is estimated to be 688,000 BO. The average drainage area of these six wells is 28 acres. The two wells on Maralo's Concord Lease have produced 57,000 BO and have an estimated ultimate recovery of 118,000 BO. These wells will drain an average of 19 acres. The applicant's studies indicate that the average well will drain 22 acres, though drainage areas range from 2 to 38 acres.

Well spacing of 330-660' is standard for 20-acre optional units. Two-factor allocation is required for a lenticular field such as this one. A formula based 95% on acreage and 5% per well will satisfy the statutory requirements.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the Wheat (Cherry Canyon) Field on January 17, 2003.

2. The Wheat (Cherry Canyon) Field was discovered in 1979, and has 42 producing wells, four injection wells and four temporarily abandoned wells.

3. There are four operators in addition to Griffen Petroleum Company which completed its only well in December, 2002.

4. Cumulative production is 2.2 million barrels and 5 BCF of gas; and the current water cut is 94%.

5. The interval between 5582' and 6410' in the Chevron Oil Company J.G. Allen Lease Well No. 15 includes all of the Cherry Canyon Formation.

6. There are multiple producing sandstones that are laterally discontinuous in the Cherry Canyon.

7. A two-factor allocation formula, such as the proposed one based 95% on acreage and 5% per well, is required for multiple reservoir fields.

8. The drainage area per well ranges from 2 to 38 acres with an average ultimate drainage area of 22 acres per well.

9. Allowing infill wells on 20-acre optional units will increase the ultimate recovery from this field.

10. Well spacing of 330-660' is standard for 20-acre optional density.

CONCLUSIONS OF LAW

1. Proper notice was given as required by statute.

2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.

3. The requested field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested field rules be adopted for the Wheat (Cherry Canyon) Field be adopted, as per the attached order.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: February 25, 2003