

OIL AND GAS DOCKET NO. 06-0226115

THE APPLICATION OF J-W OPERATING COMPANY FOR TEMPORARY FIELD RULES IN THE PERCY WHEELER (STRAY T.P.) FIELD, CHEROKEE COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: September 13, 2000

Hearing held: November 7, 2000

Appearances

Steve Towns

David C. Williams

Representing

J-W Operating Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

A new field discovery with field rules for the Percy Wheeler (Stray T.P.) Field was granted by Final Order 06-0224669, effective July 11, 2000. The two field rules adopted are summarized as follows:

1. Designated interval from 8881 to 9144 feet as shown on the log of the J-W Operating Co. Russell Ward Lease Well No. 2; and
2. allocation based 95% on potential and 5% per well.

J-W Operating is seeking the following temporary field rules for the Percy Wheeler (Stray T.P.) Field:

2. 467-1200 foot well spacing;
3. 160 acre oil proration units with 40 acre tolerance for the last well on a lease, and a maximum diagonal of 4500 feet;
4. allocation based 75% on acreage and 25% per well.

The examiner suggested that the spacing rule be 933-1867 feet which is standard for 160-acre proration units and the applicant had no objection to this suggestion.

DISCUSSION OF THE EVIDENCE

J-W Operating's Russell Ward Lease Well No. 2 was completed in March of 1999. In June of 1999, the well was opened to sales in the Percy Wheeler (Travis Peak) Field with an allowable of 23 BOPD. In July, 2000, the new field designation of Percy Wheeler (Stray T.P.) was granted for this well though the well has not yet been transferred to the new field. In June of 2000, J-W Operating completed the Russell Ward Well No. 3, and it is the only well currently in the Percy Wheeler (Stray T.P.) Field.

The initial potential of Well No. 2 was 25 BOPD and 340 MCF/D; and the initial potential of Well No. 3 was 52 BOPD with a gas/oil ratio of 16,964 cubic feet per barrel. Cumulative production from Well No. 2 is 6500 BO and the remaining reserves have been estimated at 30,000 BO. Cumulative production from Well No. 3 is 2200 BO and this well's remaining reserves are estimated to be 71,000 BO.

The Russell Ward Well No. 2 was selectively perforated from 8898 to 9140 feet in two Travis Peak oil-bearing sands that are not present in the nearby Percy Wheeler (Travis Peak) gas wells. Well No. 3 was perforated from 8853 to 9199 feet. The previously designated field interval which extends from 8881 to 9144 feet as shown on the log of the J-W Operating Co. Russell Ward Lease Well No. 2 includes the correlative interval in Well No. 3. No further wells are likely in this field and therefore no need for well spacing other than that standard for 160 acre proration units.

The porosity in Well No. 2 is 9% and in Well No. 3 is 12%, while the water saturation in both wells is 47%. The net pay in the Well No. 2 is 18 feet, and in Well No. 3 is 35 feet. Volumetric calculations show the recoverable oil available to Well No. 2 to be 14 barrels per acre-foot and to Well No. 3 to be 19 barrels per acre-foot, assuming only 6.04% recovery. Based on these calculations, Well No. 2 will drain 117 acres and Well No. 3 will drain 112 acres. Even assuming 8% recovery, each well can drain 90 acres.

Well No. 2 is currently producing 7 to 8 BOPD and Well No. 3 is producing 13 to 36 BOPD. The applicant expects the decline curves to be hyperbolic and that the wells can continue to produce at these rates for several more years. Because of the large proration units that the applicant wants to assign, the examiner recommends that these rules be reviewed in 12 rather than the standard 18 months. If producing rates decline substantially in 12 months, the temporary rules should be rescinded or amended.

Allocation based largely on acreage will protect correlative rights better than allocation based largely on potential.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the field on September 22, 2000.
2. Notice of this hearing was published in the Cherokeean/Herald, a newspaper of general circulation in Cherokee County, on September 28, and October 5, 12 and 19, 2000.
3. The Percy Wheeler (Stray T.P.) Field was designated in July, 2000, though the discovery well, J-W Operating's Russell Ward Lease Well No. 2, has not yet been transferred to the new field.
4. The only well now in the subject field is the applicant's Russell Ward No. 3 which was completed in June, 2000, with an initial potential of 52 BOPD and a gas/oil ratio of 16,964 cubic feet per barrel.
5. Oil proration units of 160 acres are appropriate for temporary field rules but only for a period of 12 months.
 - a. Cumulative production from Well No. 2 is 6500 BO and the remaining reserves have been estimated at 30,000 BO.
 - b. Cumulative production from Well No. 3 is 2200 BO and this well's remaining reserves are estimated to be 71,000 BO.
 - c. Assuming the unusually pessimistic value of 8% recovery, each well can drain 90 acres.
 - d. Well No. 2 is currently producing 7 to 8 BOPD and Well No. is producing 13 to 36 BOPD.
 - e. The applicant expects the wells' decline rates have leveled out and that the wells will be able to continue producing about the same rates for several years.
6. Well spacing of 933-1867 feet is standard for 160-acre proration units.
7. The two productive Travis Peak stray sands in this field occur between 8881 feet and 9144 feet, as shown on the log of the Russell Ward Well No. 2.
8. Allocation based 75% on acreage and 25% per well will protect correlative rights while satisfying statutory requirements for a two-factor allocation formula.

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 temporary field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the suggested temporary field rules be adopted for the Percy Wheeler (Stray T.P.) Field, and be reviewed in 12 months.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: November 20, 2000