March 30, 2000

OIL AND GAS DOCKET NO. 05-0224104

THE APPLICATION OF HERD PRODUCING COMPANY, INC., TO CONSOLIDATE THE FARRAR, SE. FIELD INTO THE FARRAR (TRAVIS PEAK) FIELD AND TO AMEND THE OPERATING RULES AND REGULATIONS FOR THE FARRAR (TRAVIS PEAK) FIELD, FREESTONE AND LIMESTONE COUNTIES, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: February 23, 2000 Hearing held: March 30, 2000

Appearances

Representing

John Soule Rick Johnston Herd Producing Company, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Herd Producing Company is proposing that the Farrar, SE. Field, which produces from the Travis Peak formation, be consolidated into the Farrar (Travis Peak) Field.

Herd Producing is also proposing that the existing rules for the Farrar, SE. Field, adopted in Final Order No. 5-72,143, effective April 23, 1979, as amended, be rescinded and that the rules for Farrar (Travis Peak) be amended. The existing rules for the Farrar (Travis Peak) Field were adopted May 21, 1979, under Docket No. 5-72,480, as amended, and are summarized as follows:

- 1. Well spacing of 660-1320 feet;
- 2. 640 acre gas proration units with 320-acre optional units; and
- 3. Allocation based 25% on acreage and 75% on deliverability.

Herd Producing seeks to rescind the spacing and density rules and to adopt the following two rules:

- 1. Designated interval between 8500 feet and 10,450 feet as shown on the log of the Herd Producing Company, Inc., Sadler Lease, Well No. 1; and
- 2. Allocation based 95% on deliverability and 5% per well.

Oil & Gas Docket No. 05-0224104

DISCUSSION OF THE EVIDENCE

Herd operates wells in both fields being consolidated. These two fields have grown together horizontally and Herd believes they should all be governed by one set of rules. All of the wells in these fields produce from the same Travis Peak section. The applicant intends to develop the area further by recompleting deeper wells and by drilling new wells.

The type log is from the Herd Producing Company Sadler Lease Well No. 1, which was drilled in 1977 by Adobe Oil Company. The top of the proposed designated interval (8500 feet) is the top of the Travis Peak and the base (10,450 feet) is the base of the Travis Peak sandstone/shale sequence. Because of the multiple reservoirs included within the proposed designated interval, a two factor allocation formula is necessary. If the density rule is rescinded as proposed, the allocation rule can no longer be based in any part on assigned acreage. An allocation formula based 5% per well and 95% on deliverability is close to the Statewide Rule and will satisfy statutory requirements. This is also the same allocation rule as presently found in the Farrar, SE. Field.

At present, Herd operates six wells in the Farrar (Travis Peak) Field and thirty in the Farrar, SE. Field. St. Johns Operating Company has one inactive well in the Farrar (Travis Peak) Field and Production Gathering Company has one inactive well in the Farrar, SE. Field. All of the wells in the Farrar (Travis Peak) Field have deliverabilities of less than 300 MCF/D. The highest daily deliverability rate of any Farrar, SE. well is 1 MMCF, though active wells in the Farrar, SE. Field average 333 MCF/D. Cumulative production from the Farrar (Travis Peak) field is 6,900 MMCF and from the Farrar, SE. Field is 38,900 MMCF. Both fields were discovered in 1977.

The Farrar, SE. Field has rules specifying 320 acre proration units with 160-acre optional units. The applicant has estimated the ultimate recovery of three wells in the Farrar, SE. Field and calculated their drainage areas. Their porosity is 11% and the net pay ranges from 100 to 183 feet. The oldest of these three wells had virgin pressure and its ultimate recovery is expected to be 2,584 MMCF. This well may drain as much as 34 acres, but the two newer wells are each expected to recover less than 700 MMCF and drain less than 8 acres.

The applicant believes that few of the wells in either field will drain more than 40 acres and the spacing and density rules should therefor be rescinded. Two wells now in the Farrar (Travis Peak) Field were analyzed and both had porosities of 8%. One well had an estimated 125 feet of pay, and is expected to recover 1,515 MMCF while draining 23 acres. The other well is estimated to recover 1298 MMCF, but because it had only 22 feet of perforated pay, its drainage area is calculated to be 132 acres. According to the applicant, this well probably has more than 22 feet of pay section contributing gas to the production.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in fields within the Farrar, SE. and the Farrar (Travis Peak) Field, on March 7, 2000.

Oil & Gas Docket No. 05-0224104

- 2. Both fields produce from the same stratigraphic interval, have grown together horizontally, and should be consolidated into a single field.
- 3. The field rules for the Farrar, SE. Field, that were adopted in Final Order No. 5-72,143, effective April 23, 1979, as amended, should be rescinded when the wells from this field are transferred into the Farrar (Travis Peak) Field.
- 4. Both fields were discovered in 1977, and both produce from the Travis Peak section which contains numerous lenticular sandstones.
- 5. The designated interval proposed for the consolidated Farrar (Travis Peak) Field extends from the top of the Travis Peak at 8500 feet to the base of the formation at 10,450 feet as shown on the log of the Herd Producing Company Sadler Lease, Well No. 1.
- 6. This designated interval includes multiple, stratigraphic reservoirs and a two factor allocation is required for statutory reasons.
- 7. Without a density rule, no part of the allocation formula can be based on assigned acreage.
- 8. The proposed allocation formula, based 5% per well and 95% on deliverability, will protect correlative rights and satisfy statutory requirements.
- 9. Cumulative production from the two fields to be consolidated is 45.8 BCF.
- 10. Current production from the active wells in the proposed consolidated field averages less than 350 MCF/D.
- 11. Statewide spacing and density rules are appropriate for the consolidated Farrar (Travis Peak) Field.
 - a. Calculated drainage areas from three wells in the Farrar, SE. Field range from 8 to 34 acres.
 - b. Calculated drainage areas for two wells now in the Farrar (Travis Peak) Field are 23 and 132 acres.

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.

Oil & Gas Docket No. 05-0224104

- 3 Consolidation of the requested fields will prevent waste and protect correlative rights, while encouraging conservation.
- 4. The requested amended field rules for the remaining field, the Farrar (Travis Peak) Field, will prevent waste, protect correlative rights within the field, and satisfy statutory requirements.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the Farrar, SE. Field be consolidated into the Farrar (Travis Peak) Field. The existing rules for the Farrar (Travis Peak) Field should be amended to include the proposed designated interval and allocation formula, while the special rules governing spacing and density should be rescinded.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission action: April 25, 2000.

Exhibits

- 1. Proration schedule
- 2. Proposed rules
- 3. Map
- 4. New field discovery for Farrar (Travis Peak)
- 5. New field discovery for Farrar, SE.
- 6. Type log
- 7. EUR and drainage calculations for the Sadler Well No. 2
- 8. EUR and drainage calculations for the Phillips GU "A" No. 2
- 9. EUR and drainage calculations for the Perlitz GU 1, Well No. 2
- 10. EUR and drainage calculations for the Fulton GU 1, Well No 4
- 11. EUR and drainage claculations for the Thompson GU 1 Well No. 3
- 12. Cumulative production from subject fields