March 30, 2000

OIL AND GAS DOCKET NO. 05-0224105

THE APPLICATION OF HERD PRODUCING COMPANY, INC.,TO CONSOLIDATE VARIOUS FARRAR FIELDS INTO THE FARRAR (COTTON VALLEY SAND) FIELD AND TO AMEND OPERATING RULES AND REGULATIONS FOR THE FARRAR (COTTON VALLEY SAND) 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	Herd Producing Company, Inc.
Rick Johnston	

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Herd Producing Company is seeking to have the following Farrar fields consolidated into the Farrar (Cotton Valley Sand) Field:

Farrar, N. (Bossier Sand)	30323 400
Farrar, N. (Cotton Valley Sand)	30323 500
Farrar, SE (Cotton Valley Sand)	30325 650
Farrar, SE. (Bossier Sand A)	30325 600

Herd Producing is also proposing that the existing rules for these fields be rescinded and that the rules for Farrar (Cotton Valley Sand) be amended. The existing rules for the Farrar (Cotton Valley Sand) 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 on acreage.

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

1. Designated interval between 10,466 feet and 12,440 feet as shown on the log of the Herd Producing Company, Inc., Reed Gas Unit No. 1 Lease, Well No. 2; and

2. Allocation based 95% on deliverability and 5% per well.

DISCUSSION OF THE EVIDENCE

Herd operates wells in four of the five fields being consolidated. There are no active wells in the fifth field, the Farrar, SE (Cotton Valley Sand). Herd previously operated a well in the Farrar, SE (Cotton Valley Sand) Field, but the field was abandoned after producing only 68 MMCF of gas. All five fields have grown together horizontally and Herd believes they should be governed by one set of rules.

Herd is requesting that the Farrar, N. (Bossier Sand); Farrar, N. (Cotton Valley Sand); Farrar, SE (Cotton Valley Sand); and Farrar, SE. (Bossier Sand A) Fields be consolidated into the Farrar (Cotton Valley Sand) Field. The Farrar (Cotton Valley Sand) and Farrar, N. (Cotton Valley Sand) Fields were discovered in 1977, the Farrar, SE. (Bossier Sand A) Field was discovered in 1979, and the other two fields were discovered in 1980.

All of the wells in these fields produce from the same section which includes the Cotton Valley sandstones and Bossier sandstones. Several wells have been perforated in both Cotton Valley sands and Bossier sands, though none of these wells are dually completed. The applicant intends to develop the area further by recompleting older wells and by drilling new wells.

The type log is from the Herd Producing Company Reed Gas Unit No. 1 Well No. 2, which was drilled in 1993. The top of the proposed designated interval (10,466 feet) is the top of the Cotton Valley sandstone and the base (12,440 feet) is the bottom of the underlying Bossier sand/shale sequence. Because of the multiple reservoirs included within the proposed designated interval, a two factor allocation formula is necessary. One based 5% per well and 95% on deliverability is close to the Statewide Rule and will satisfy statutory requirements.

At present, Herd operates the four wells in the Farrar (Cotton Valley Sand), the four in the Farrar, N. (Cotton Valley) and the only well in the Farrar, SE. (Bossier Sand A) Field. There are two wells in the Farrar, N. (Bossier Sand) Field, one operated by Herd and one operated by Marathon Oil Company. Marathon's well has a deliverability below 100 MCF/D and Marathon has no objection to this application.

The applicant has estimated the ultimate recovery of five of the wells that will be in the

consolidated field and calculated their drainage areas. The calculated porosity varies from 8 to 11% and the net pay varies from 86 to 148 feet. Estimated ultimate production varies from 42 MMCF to 980 MMCF and the calculated drainage areas range from 1 to 15 acres. All of the wells in the fields to be consolidated produce less than 100 MCF/D except for the Lyons Gas Unit No. 1, Well No. 1, in the Farrar, N. (Cotton Valley Sand) Field, which has a deliverability of 294 MCF/D. Herd believes that Statewide Rules governing spacing and density are appropriate.

The Farrar, SE (Cotton Valley Sand) Field is under Statewide Rules; the other fields have density rules specifying 640 acres with 320 acre-optional units, with various spacing rules. The fields with the most cumulative production are the Farrar, N. (Bossier Sand) Field (3,365 MMCF and 1600 BC) and the Farrar, N. (Cotton Valley Sand) Field (2,537 MMCF and 5600 BC). The field remaining after consolidation, the Farrar (Cotton Valley Sand) Field, has produced the relatively small amount of 574 MMCF to date.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators of wells in the fields to be consolidated on March 7, 2000.

2. The following fields produce from the same stratigraphic interval, have grown together horizontally, and should be consolidated into a single field:

FIELD	FIELD NUMBER
Farrar (Cotton Valley Sand)	30321 400
Farrar, N. (Bossier Sand)	30323 400
Farrar, N. (Cotton Valley Sand)	30323 500
Farrar, SE (Cotton Valley Sand)	30325 650
Farrar, SE. (Bossier Sand A)	30325 600

3. The following fields have special field rules that should be rescinded when four of these fields are consolidated into the Farrar (Cotton Valley Sand) Field:

FIELD	FINAL ORDER NO.	EFFECTIVE DATE
Farrar, N. (Bossier Sand)	5-79868	August 22, 1983
Farrar, N. (Cotton Valley Sand)	5-72497	May 29, 1979
Farrar, SE. (Bossier Sand A)	5-73557	December 1, 1979

4. The Farrar Bossier and Cotton Valley sand fields were first developed in 1977, and produce from a continuous section containing numerous lenticular sandstones.

5. The designated interval proposed for the consolidated Farrar (Cotton Valley Sand) Field extends from the top of the Cotton Valley Sand at 10,466 feet to the base of the underlying Bossier Formation at 12,440 feet as shown on the log of the Herd Producing Company Reed

Gas Unit No. 1, Well No. 2.

6. This designated interval includes multiple, stratigraphic reservoirs and a two factor allocation is required for statutory reasons.

7. Allocation based 5% per well and 95% on deliverability will protect correlative rights and satisfy statutory requirements.

8. Cumulative production from the five fields to be consolidated is 7.11 BCF.

9. Current production from the eleven active wells in the proposed consolidated field averages less than 100 MCF/D.

10. Calculated drainage areas from five wells in the fields to be consolidated range from 1 to 15 acres, indicating that Statewide spacing and density rules are appropriate for the consolidated Farrar (Cotton Valley Sand) Field.

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 Consolidation of the requested fields will prevent waste and protect correlative rights, while encouraging conservation.

4. The requested amended field rules for the resultant field, the Farrar (Cotton Valley Sand) 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, N. (Bossier Sand); Farrar, N. (Cotton Valley Sand); Farrar, SE (Cotton Valley Sand); and Farrar, SE. (Bossier Sand A) Fields be consolidated into the Farrar (Cotton Valley Sand) Field. The existing rules for the Farrar (Cotton Valley Sand) 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. Summary of rules in the various fields
3. Map
4. Type log
5. Cross section
6. EUR and drainage calculations for the Stone GU 1, Well No. 1
7. EUR and drainage calculations for the Reed GU 1, Well No. 2
8. EUR and drainage calculations for the Shorter No. 1
9. EUR and drainage calculations for the Triple H Ranch GU 1, Well No 3
10. EUR and drainage calculations for the Standley GU 2, Well No 3
11. Cumulative production from subject fields