#### OIL AND GAS DOCKET NO. 03-0224874

# THE APPLICATION OF COASTAL OIL & GAS CORPORATION TO AMEND FIELD RULES IN THE BONUS, SW. (WILCOX) FIELD, WHARTON COUNTY, TEXAS

**Heard by:** Margaret Allen, Technical Hearings Examiner

**Procedural history** 

Application received: May 15, 2000

Hearing held: June 5, 2000

**Appearances** 

Representing

Jim Cowden Coastal Oil & Gas Corporation

Terry Payne

Tom Weber TransTexas Gas Corp.

#### **EXAMINER'S REPORT AND RECOMMENDATION**

### STATEMENT OF THE CASE

The existing rules for the Bonus, SW. (Wilcox) Field were adopted December 3, 1998, under Docket No. 03-0220501, and are summarized as follows:

- 1. Designated interval between 10,300 feet and 11,700 feet as shown on the log of the Adobe Energy, Inc. L.D. Obenhaus Lease No. 2.
- 2. Allocation based 25% per well and 75% on deliverability.

Coastal seeks standing to amend the designated interval to one between 10,270 to 13,430 feet as shown on the log of its Mahalitc Lease Well No. 2. TransTexas appeared at the hearing as an interested party but had no objection to this application.

#### **DISCUSSION OF THE EVIDENCE**

The Bonus, SW. (Wilcox) Field was discovered in May of 1998 with the completion of the Obenhaus No. 2, now operated by TransTexas Gas Corp. The proration schedule shows two wells

in the field, both operated by TransTexas. Coastal has drilled five new wells that are completed within the current designated interval and also in lower Wilcox sands. TransTexas has also drilled an additional well to this field.

The productive interval in the discovery well was designated as that lying between 10,300 and 11,700 feet as this well was perforated in two Wilcox sands near the top and base of that interval. A two-factor allocation formula, based 75% on deliverability and 25% per well was adopted because of the multiple lenticular reservoirs in the designated interval. Coastal's new wells have encountered production in the current designated interval and in at least five different Wilcox sands below the total depth of the discovery well.

Coastal's wells have not yet been placed in the Bonus, SW. (Wilcox) Field because their perforations include sandstones outside the current designated interval. to 1700 feet below the based of this interval. Coastal proposes to extend the base of the designated interval by 1700 feet-- to 14,430 feet as shown on the log of Mahalitc No. 2. Coastal proposes maintaining the same top of the correlative interval which is at 10,300 feet in the Obenhaus No. 2 and at 10,270 feet in the Mahalitc No. 2.

The two older TransTexas wells are now averaging 3.5 to 9 MMCF per day, and the Obenhaus No. 2 has cumulative production of 2.5 BCF and 77,000 barrels of condensate from the last two years. Daily production from Coastal's new wells ranges from 6 to 23 MMCF, while that of TransTexas' new well is 15 MMCF.

If the economic limit is lowed by consolidating the lower Wilcox sands into the current designated interval, it will increase each wellbore's possible production by 1/4 BCF above that which could be produced by completing the sands sequentially. All of the Wilcox sandstones within the proposed designated interval are overpressured, with a gradient of 0.8 to 0.85 psi per foot of depth. Gas analyses indicate that the gas produced from the current interval has similar composition to that from the deeper Wilcox sandstones. This gas contains traces of nitrogen and about 2.5%  $CO_2$ , which tends to be corrosive and shorten wellbore life. The nearest Wilcox production to the Bonus, SW. (Wilcox) Field is over 3 miles away; therefor the proposed designated interval is not part of any other designated field.

#### **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all operators in the Bonus, SW. (Wilcox) Field on May 23, 2000.
- 2. The Bonus, SW. (Wilcox) Field was discovered in 1998 with the completion of the Oberhaus Well No. 2.
- 3. The discovery well was perforated in two sandstones near the top and base of the interval between 10,300 to 11,700 feet, that was designated as the correlative interval for the Bonus, SW. (Wilcox) Field.

- 4. A two-factor allocation formula, based 75% on deliverability and 25% per well, was and remains necessary due to the multiple producing reservoirs within the currently designated interval.
- 5. There are two wells on the proration schedule, both operated by TransTexas Gas Corp.
- 6. There have been six new wells drilled in the area between the two existing wells, five by Coastal Oil & Gas and one by TransTexas Gas Corp., and other wells are now being drilled for this field.
- 7. The new gas wells encountered production within the current designated interval and in at least five Wilcox sandstones deeper than the discovery well was drilled.
- 8. The discovery well has produced 2.5 BCF during its first two years and is still producing about 13 MMCF per day.
- 9. The current gas rates from the new wells range from 6 to 23 MMCF per day.
- 10. Gas analyses indicate that gas produced from the various Wilcox sandstones within the proposed designated interval are similar.
- 11. Lowering the economic limit by combining the lower Wilcox sandstones with the current designated interval will result in the production of an incremental 1/4 BCF per wellbore.
- 12. The newly drilled wells have not been placed in the Bonus, SW. (Wilcox) Field because their perforated intervals include sandstones outside the currently designated interval but belong in this field and should be placed there without allowable penalty.

#### **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.
- The requested amendment to the field rules for the Bonus, SW. (Wilcox) Field will prevent waste, protect correlative rights within the field, and provide for orderly development of the field.

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the existing designated interval rule for the Bonus, SW. (Wilcox) Field be amended as requested.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission action: June 22, 2000.

# **Exhibits**

- 1. Proration schedule
- 2. Base map
- 3. Field rule order
- 4. Cross section
- 5. Well completion data
- 6. Production graphs
- 7. Incremental production
- 8. Pressure data
- 9. Gas analyses
- 10. Water analysis