# OIL AND GAS DOCKET NO. 02-0222646

# THE APPLICATION OF COASTAL OIL & GAS CORPORATION FOR FIELD RULES IN THE DRY HOLLOW (WILCOX MASSIVE) FIELD, LAVACA COUNTY, TEXAS

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

#### **Procedural history**

Application received: September 2, 1999 Hearing held: September 28, 1999

# **Appearances**

Representing

Jim Cowden Terry Payne Coastal Oil & Gas Corporation

# **EXAMINER'S REPORT AND RECOMMENDATION**

# **STATEMENT OF THE CASE**

Coastal Oil & Gas Corporation is seeking the following field rules:

- 1. Top of the designated interval at 14,090 feet as shown on the log of the Coastal O.A. Lampley Well No. 6 and base at 15,770 feet as shown on the log of the Coastal O.A. Lampley Well No. 9; and
- 2. Allocation based 95% on deliverability and 5% per well.

#### DISCUSSION OF THE EVIDENCE

The Dry Hollow (Wilcox Massive) Field was approved as a new field in June of 1999, with a designated interval extending from 14,090 to 14,695 feet in the discovery well. The first well in the field was Coastal's O.A Lampley Lease Well No. 6, which had an initial test of 25 MMCF/D at a bottom-hole pressure of 12,000 psi. A second well was completed in July that encountered reserves lower in the Massive Wilcox formation than the designated interval. This well, the O.A. Lampley Well No. 9, was first perforated between 15,338 and 15,420 feet, and a second set of perforations was added between 15,715 and 15,602 feet. The producing rates from each of these sets of perforations dropped quickly as did the flowing tubing pressure. The applicant set temporary plugs above these perforations and perforated a third interval in the Massive Wilcox. This interval, between 14,968 to 14,748 feet, is the only section that is within the originally designated correlative interval. The two lower intervals are faulted out of the discovery well, indicating that they probably have smaller areal extents.

The initial producing rate of Well No. 9, from only the uppermost set of perforations, was 4100 MCF/D. Because the producing rates from the two lower zones dropped quickly, Coastal does not believe that it would be economic to complete these intervals separately. Well No. 9 cost \$5,500,000 to drill and complete because of its depth and overpressure. Unless operators are allowed to combine poorer intervals with more productive sandstones, the reserves within the poorer intervals will be unrecovered.

Cumulative production from the discovery well has been 1.5 BCF since April of 1999, and the second well has produced 50 MMCF since July. All of the Massive Wilcox sands perforated in either well produce similar hydrocarbons, i.e. dry gas without condensate. Both wells are good candidates for tight gas sand designation and both have been fracture stimulated, making water comparisons difficult. All of the sands are part of the Massive Wilcox, and there should be no waste caused by incompatible fluids.

The applicant is doing additional drilling in the area, and allowing less productive intervals to be produced with more productive intervals will promote further development of the Wilcox Massive. Because the proposed designated interval includes multiple reservoirs not in communication, a two-factor allocation formula is required for statutory reasons. The formula proposed is close to the Statewide allocation formula. The applicant is not requesting any changes to the Statewide rules for spacing and density.

#### FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators in the Dry Hollow (Wilcox Massive) Field and to all offset operators to the discovery tract on September 10, 1999.
- 2. The Dry Hollow (Wilcox Massive) Field was discovered in April of 1999, and has two producing wells, both operated by Coastal.
- 3. The current designated interval extends from 14,090 to 14,695 feet, as shown on the log of the discovery well, the O.A. Lampley Well No. 6.
- 4. The second well, the O.A. Lampley No. 9, encountered productive Massive Wilcox sands below the correlative interval designated in the discovery well.
- 5. When the perforations between 15,338 and 15,420 feet were tested in Well No. 9 the producing rate decreased quickly as did the producing rate from a second set of perforations between 15,715 and 15,602 feet.
- 6. Temporary plugs were set above these perforations and the well perforated from 14,968 to 14,748 feet, a zone that is within the designated correlative interval.
- 7. It is not economically possible to produce the lower Massive sands by themselves.
  - a. They have limited areal extent as shown by the fact that they are faulted out of the discovery well.

- b. The rapid drop in producing rate and in flowing tubing pressure from these lower sands show that they are cannot be developed economically unless they can be consolidated with more productive intervals.
- c. This area is being rapidly developed and allowing smaller producing sands with larger will encourage further drilling.
- 8. The three productive zones within the proposed designated interval produce similar gas from rock that is all part of the same formation.
- 9. A field whose designated interval includes multiple, non-connected reservoirs is required by statute to have a two-factor allocation formula.
- 10. The proposed allocation formula, based 95% on deliverability and 5% per well, is close to the Statewide 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 field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoirs.

#### **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the requested field rules for the Dry Hollow (Wilcox Massive) Field be approved, as per the attached order.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: October 19, 1999

# **Exhibits**

- 1. Proration schedule
- 2. New field discovery
- 3. Map
- 4. Cross section
- 5. Wellbore schematic for Well No. 6
- 6. Wellbore schematic for Well No. 9
- 7. Forms G-1 for both wells
- 8. Combined rate vs time graph
- 9. Separate rate/time graphs for each well