May 25, 2000

OIL AND GAS DOCKET NO. 04-0224613

THE APPLICATION OF COASTAL OIL & GAS CORPORATION FOR NEW FIELD DESIGNATION AND TWO FACTOR ALLOCATION FORMULA FOR (PROPOSED) JEFFRESS, E. (VICKSBURG L) FIELD, HIDALGO COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: April 13, 2000
Hearing held: May 24, 2000

Appearances

	Representing
James Cowden	Coastal Oil & Gas Corporation
Terry Payne	

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Coastal Oil & Gas is seeking to have its Coates "A" Lease Well No. 26 (between 8530 and 8940 feet) designated as the discovery well for a field to be known as Jeffress, E. (Vicksburg L) Field. Because the field contains multiple lenticular reservoirs a two-factor allocation formula is necessary. Coastal is proposing the following rules:

1. Designated interval from 8530 to 8940 feet as shown on the log of the Coastal Oil & Gas Coates "A" Lease Well No. 26;

2. well spacing of 467-933 feet; and

3. allocation based 5% per well and 95% on deliverability

The statewide density requiring 40 acre drilling units would remain in effect and there would be no rule prescribing proration units.

DISCUSSION OF THE EVIDENCE

The Coates "A" Lease Well No. 26 was completed in March of 2000, and perforated between 8530 and 8595 feet in the Vicksburg L sand. This set of perforations was tested April 9, and the maximum producing rate on that test was 11,463 MCF/D. The static bottom-hole pressure was 6727 psi, indicating a typical gradient for this area of 0.8 psi per foot. There are numerous surrounding Vicksburg wells in the area, carried in several different fields. The closest well producing from the Vicksburg L sand is about 1-1/2 mile away and is fault separated from the Coates "A" Well No. 26.

Prior to the completion in the L sand, the applicant perforated and tested the Vicksburg S and Vicksburg O/P sands. These lower perforations were isolated before the L sand was tested but shortly afterward the temporary plugs were removed and the well has produced in a commingled state since. Cumulative commingled production from the Coates "A" No. 26 is 725 MMCF. In late April, 2000, the applicant tested the L sand in a second well in this reservoir, the Coates "A" Well No. 31, and found a bottom-hole pressure of 7029 psi. Coastal then commingled the L sand in Well No. 31 with the Vicksburg S and O/P sands. Coastal's Coates "A" Well No. 5 also has commingled production from the Vicksburg L sand in the subject field and production from sands classified as the Vicksburg O/P. Current commingled daily production from Well No. 26 is 23 MMCF, from Well No. 31 is 40 MMCF, and from Well No. 5 is 1.4 MMCF.

The L sand reservoir is located in the corner between a north-south fault and a northeast-southwest fault. Only a relatively small area above the water contact at about -8300 feet is expected to be productive. Coastal is very actively developing the Vicksburg in this area and owns all of the leases within the productive limits of the proposed field. Existing wells now producing from other Vicksburg sands may be recompleted to the L sand. Most of the other Vicksburg fields in the Jeffress, East area have between-well spacing of 933 feet. A spacing rule for this field allowing wells to be as close as 933 feet will make it easier to recomplete or commingle wells between fields.

The statewide spacing rule for the new field would require wells on the same lease to be 1200 feet apart. In order to drill wells at least 1200 feet apart, each well must be located within a 1.3 acre square in the middle of its 40-acre drilling unit. If wells can be as close as 933 feet to each other, the square in the center of each 40-acre unit where a regular well can be drilled, increases to 13.7 acres.

The entire Vicksburg L sand extends from 8530 to 8940 feet in the Coates "A" Lease Well No. 26. The currently perforated reservoir is near the top of the L sand but there are deeper sandstones within the L interval that could be separate reservoirs. Because of the possible multiple reservoirs, a two-factor allocation formula is required by statute. One based 5% per well and 95% on deliverability is close to the Statewide allocation formula, while satisfying the statutory requirement for two factors.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the proposed Jeffress, E. (Vicksburg L) Field and to all offset operators to the discovery tract on April 28, 2000.

2. The discovery well for the proposed Jeffress, E. (Vicksburg L) Field, the Coates "A" Lease Well No. 26, was completed in the Vicksburg L sand on April 9, 2000.

3. Older wells producing from a comparable interval within 2-1/2 miles of the Coates "A" Lease Well No. 26 are separated from this well by faults.

4. The Coates "A" No. 26 was perforated from 8530 to 8595 feet and tested at a rate of 11,463 MCF per day.

5. The static bottom-hole pressure in the L sand in the Coates "A" Well No. 26 was 6727 psi indicating a pressure gradient of 0.8 psi per foot, which is a typical gradient for this area.

6. The L sand in the Coates "A" No. 26 has been commingled with two other Vicksburg fields and the total cumulative production is already 0.75 BCF.

7. Two other wells have also been completed in the L sand, and these wells also commingle the L with other Vicksburg reservoirs.

8. Most other Vicksburg fields have 933-foot between-well spacing and similar spacing for the L sand will facilitate recompletions and commingling among the various Vicksburg fields.

9. The Vicksburg L formation in the proposed new field extends from 8530 feet to 8940 feet as shown on the log of the discovery well, and includes several lenticular sandstones within it.

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

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 Coastal Coates "A" Lease Well No. 26, in the Vicksburg L sand between 8530 and 8940 feet, is entitled to be considered a new field discovery well as it produces from a reservoir that has not been produced before.

4. The requested designated interval, well spacing and allocation formula 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 Coastal Coates "A" Lease Well No. 26, between 8530 and 8940 feet, be considered the discovery well for a new field and that the requested rules for the newly-designated Jeffress, E. (Vicksburg L) Field be approved.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: June 6, 2000

Exhibits

1. P-7
2. Map
3. Data sheet for wells within 2-1/2 miles
4. Form G-1
5. Log
6. Rate vs. time graph
7. Structure map
8. BHP data
9. Gas analyses
10. Water analyses
11. Field rules summary
12. Field areas base map
13. Illustration of between-well spacing flexibility