OIL AND GAS DOCKET NO. 03-0227765

THE APPLICATION OF COBRA OIL & GAS CORP. FOR TEMPORARY FIELD RULES, LARRY JOHNSON (LOWER VICKSBURG) FIELD, FORT BEND COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: March 9, 2001 Hearing held: April 11, 2001

Appearances

Representing
Dick Schmidt Cobra Oil & Gas Corp.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Cobra is seeking the following temporary field rules:

- 1. Designated interval from 8652 to 8670 feet, measured depth, as shown on the log of the Cobra Libra Unit Well No. 2;
- 2. 467-1200 feet well spacing;
- 3. 320 acre oil proration units with 40-acre tolerance for the last well on a lease and a maximum diagonal of 7500 feet; and
- 4. allocation based on acreage.

DISCUSSION OF THE EVIDENCE

The Larry Johnson (Lower Vicksburg) Field was discovered December 7, 2000, with the completion of the Cobra Libra Unit Well No. 2. This well was perforated from 8652 to 8658 feet, measured depth, (8498 to 8504 feet true vertical depth) and its initial potential was 301 BOPD and 117 MCF/D, with no water. Since its completion, the Libra Unit Well No. 2, the only well in the field, has produced 40,000 BO and 26 MMCF. The well's producing rate is about 7800 barrels of oil per month and has not shown any decline yet. The initial reservoir pressure was 6630 psi, and the flowing pressure has remained about 3600 psi.

The Larry Johnson (Lower Vicksburg) reservoir is located on a small closure southeast of a northeast-southwest trending fault. The pay sand extends from 8652 to 8670 feet, measured depth,

and appears rather shaly on the log. Cobra intends to locate three more wells in this sand, based on 3d seismic. It has requested smaller spacing than standard to be able to locate those wells in the optimal positions identified by the seismic. Cobra owns all of the leases around the Libra No. 2.

Porosity in the Libra Unit No. 2 is 26%, water saturation is 25% and the net pay is 7 feet. The Libra No. 2 will ultimately recover 590,000 BO, assuming its production declines 15% per year. Volumetric calculations indicate that this would drain 314 acres, assuming 25% recovery of the original oil in place.

There are two nearby Lower Vicksburg oil fields, separated from the subject one by faults. These fields have 320 acre oil proration units, and there are also several Lower Vicksburg gas fields in the area that are on 320 acre density. Allocation based on acreage will protect correlative rights. The yardstick allowable for oil wells at this depth on 320 acres will be 340 BOPD.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators in the field and to all operators and unleased mineral interest owners of tracts offsetting the discovery tract on March 9, 2001.
- 2. The discovery well, the Libra Unit Well No. 2, was perforated from 8652 to 8658 feet, and its initial potential was 301 BOPD and 117 MCF/D.
- 3. The initial reservoir pressure was 6630 psi, and the flowing pressure has remained about 3600 psi.
- 4. Temporary rules specifying 320 acre units are appropriate for a period of 18 months.
 - a. The only well in the field has produced 40,000 BO and 26 MMCF of gas.
 - b. The well is now producing at a daily rate of about 260 barrels of oil.
 - c. The Libra No. 2 will ultimately recover 590,000 BO, assuming its production declines 15% per year.
 - d. Volumetric calculations indicate that this well will drain 314 acres, assuming 25% recovery of the original oil-in-place.
 - e. Two nearby Lower Vicksburg oil fields also have 320 acre proration units.
- 5. Well spacing of 467-1200 feet will allow extra flexibility in locating wells at the optimal locations shown by 3d seismic.
- 6. The pay sand extends from 8652 feet to 8670 feet, measured depth.

7. Allocation based on acreage will protect correlative rights.

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 temporary field rules will prevent waste, protect correlative rights within the field, and promote orderly development of the reservoir.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested temporary field rules for the Larry Johnson (Lower Vicksburg) Field be approved and reviewed in 18 months.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: April 24, 2001.