OIL AND GAS DOCKET NO. 03-0227724

THE APPLICATION OF ETOCO, INCORPORATED FOR TEMPORARY FIELD RULES AND TO RECLASSIFY THE BISHOP UNIT LEASE WELL 1 AS AN OIL WELL IN THE SRALLA ROAD (JACKSON, SW) FIELD, HARRIS COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: March 6, 2001 Hearing held: March 23, 2001

Appearances

Representing

Etoco Incorporated

James Bostic Walter Cochran

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Etoco is seeking the following temporary field rules:

- 1. Designated interval from 8712 to 8724 feet, measured depth, as shown on the log of the Etoco Bishop Unit Lease Well No. 1;
- 2. 467-1320 feet well spacing;
- 3. 160 acre oil proration units with 40-acre tolerance for the last well on a lease and a maximum diagonal of 6000 feet; and
- 4. allocation based on acreage.

Etoco is also seeking to have the only well in the field reclassified from gas to oil.

DISCUSSION OF THE EVIDENCE

The Sralla Road (Jackson, SW) Field was discovered March 23 of 1999, with the completion of the Etoco Bishop Unit Well No. 1. This well was perforated from 8712 to 8724 feet (measured depth) and its initial potential indicated it to be a gas well.

Since its completion, the Bishop Well No. 1, the only well in the field, has produced increasing amounts of oil per cubic foot of gas. March 11, 2001, the operator conducted a new potential test which showed the well capable of producing 90 BOPD and 173 MCF/D. Etoco

believes that this well was drilled on the edge of the gas cap and that underlying oil is filtering up into the perforations. If Well No. 1 is shut-in for any period of time, subsequent production has a very high gas/oil ratio for a short time.

The Sralla Road (Jackson, SW) reservoir is bounded on all sides by faults. The reservoir rock was deposited in a sandstone bar elongated from northeast to southwest. Etoco believes that the gas cap originally covered 102 acres and the oil rim covered 170 acres. A second well is planned downdip from the Bishop No. 1. The field is located in a loop of the Sabine River, near the San Jacinto Monument, among housing subdivisions. The unit formed to drill the second well comprises numerous house lots as well as state lands, and is about 5500 feet from end to end. Because of the difficulty in forming units within the bounding faults, Etoco has requested a longer diagonal and smaller spacing than standard.

Porosity in the Bishop Unit No. 1 is 27%, water saturation is 33%, the net pay is 8 feet and the permeability is 4 to 100 md. Volumetric calculations indicate the gas cap has recoverable reserves of 1.75 BCF and the oil rim has recoverable reserves of 208,000 barrels, assuming 15% recovery of the original oil in place. A 160-acre unit has 195,000 barrels of recoverable oil underneath it, and the Bishop No. 1 has already recovered 58,659 BO and 910 MMCF of gas. The best oil wells in the nearby Sralla Road (Jackson, W) and (Jackson 9050) Fields are also capable of producing at least 100,000 BO and a BCF of gas.

The two nearby Jackson oil fields also have 160 acre oil proration units. One has spacing of 467-1320 feet and the other has spacing of 660-1867 feet. The Sralla Road (Jackson 9050) Field also has a maximum diagonal of 6000 feet. Allocation based on acreage will protect correlative rights. The yardstick allowable for oil wells at this depth is 402 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 Bishop Unit Well No. 1, was perforated from a measured depth of 8712 to 8724 feet, and its initial potential indicated it to be a gas well.
- 3. The gas/oil ratio of the discovery well has increased since 1999, and the well was recently retested as an oil well at a daily rate of 90 BO and 173 MCF.
- 4. Temporary rules specifying 160 acre units are appropriate for a period of 18 months.
 - a. The only well in the field has already produced 59,000 BO and 910 MMCF of gas.
 - b. The well is now producing at a daily rate of about 100 barrels of oil and 500 MCF.
 - c. Volumetric calculations indicate that 195,000 barrels of oil are recoverable from underneath 160 acres.

- d. Two nearby Jackson oil fields also have 160 acre proration units.
- e. The best wells in the nearby Jackson oil fields are capable of producing at least 100,000 barrels of oil and 1 BCF.
- 5. There are 1.75 BCF recoverable reserves from the 170 acres of the gas cap and 202,000 barrels of recoverable oil from the 102 acres of the oil rim.
- 6. The Bishop Unit No. 1 is completed in the gas cap but as the gas has been depleted, oil has started to finger up into this well, causing it to appear to be an oil well.
- 7. There is no reason to require the Bishop Unit No. 1 to be shut-in to make up overproduction as it is the only well in the field.
- 8. A maximum diagonal of 6000 feet will facilitate the drilling of a second well on a pooled unit comprising house lots and state river bed land.
- 9. Well spacing of 660-1320 feet will allow extra flexibility in locating wells at the optimal location shown by 3d seismic.
- 10. 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.
- 4. Classification of the Etoco Bishop Unit Well No. 1 was a gas well and cancellation of its overproduction will prevent waste and will not harm correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested temporary field rules for the Sralla Road (Jackson, SW) Field be approved and reviewed in 18 months. The Bishop Unit No. 1 should be reclassified as an oil well and any overproduction for the well canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: April 24, 2001.