OIL AND GAS DOCKET NO. 02-0228996

THE APPLICATION OF CUMMINS & WALKER OIL COMPANY FOR INCREASED GAS-OIL RATIO AUTHORITY FOR ITS M. SCANIO LEASE, WELL NO. 3, REFUGIO-FOX (6500) FIELD, REFUGIO COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: July 17, 2001 Hearing held: August 30, 2001

Appearances

Representing

James M. Clark

Cummins & Walker Oil Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Cummins & Walker Oil Company wants to produce its M. Scanio Lease Well No. 3, Refugio-Fox (6500) Field, Refugio County, Texas, under increased gas-oil ratio authority, with a daily gas limit of 400 MCF. Cummins & Walker also requests that the overproduction for this well be canceled.

DISCUSSION OF THE EVIDENCE

The Refugio-Fox (6500) oil field was discovered in 1961 and the Refugio-Fox (6500) gas field was discovered in 1981, both at 6500 feet. The Cummins & Walker Miquelita Scanio Well No. 3 is the only well in the field and it was completed as a gas well in July of 2000. Its was perforated from 6355 to 6360 feet and its initial test rate was 479 MCF/D. In April of 2001, the well was reclassified to an oil well and its initial potential at that time was 50 BOPD and 202 MCF/D, for a gas/oil ratio of 4040 cubic feet per barrel.

The field allowable is 111 BOPD and 222 MCF/D. The subject well's oil allowable is penalized to 50 BOPD due to high gas/oil ratio, though the well is capable of 80 to 100 BOPD. The well produced 4300 BO during April, May and June, 2001. Gas production during that time was 2100 MCF, 1465 MCF of which was considered to be overproduction. As this is the only active well in the subject field, requiring it to make up this overproduction would not protect correlative rights.

The well was step-rate tested between July 29 and August 24, 2001. On an 9/64th inch choke, daily production averaged 42 barrels oil and 224 MCF, with a gas/oil ratio of 5333 cubic feet per barrel. On a 10/64th inch choke, daily production rates increased to 49 BO and 305 MCF, for a gas/oil ratio of 6224 cubic feet per barrel. When the choke size was increased to 11/64th inches, the gas/oil ratio decreased at first to an average of 4786 cubic feet per barrel, but then began increasing. The corresponding average daily gas and oil rates on this choke size were 56 BO and 268 MCF. On a 12/64th inch choke, the well was best able to unload liquid and the gas/oil ratio began decreasing to less than 4800 cubic feet/barrel. The daily production rates on this choke size averaged 81 BO and 422

MCF.

FINDINGS OF FACT

- 1. Notice of this hearing was issued to Cummins & Walker, the only operator of record in the Refugio-Fox (6500) Field on July 20, 2001.
- 2. The Refugio-Fox (6500) oil field was discovered in 1961 and the Refugio-Fox (6500) gas field was discovered in 1981, both at 6500 feet.
- 3. The Cummins & Walker Miquelita Scanio Well No. 3 is the only well in the field and it was completed as a gas well in July of 2000.
- 4. The subject well's perforations are from 6355 to 6360 feet and its initial test rate as a gas well was 479 MCF/D.
- 5. In April of 2001, the well was reclassified as an oil well and its oil rate was penalized to 50 BOPD because the gas/oil ratio was 4040 cubic feet per barrel.
- 6. Statewide rules specify an allowable of 111 BOPD with a daily gas limit of 222 MCF for oil wells at this depth.
- 7. The subject well was step-rate tested between July 29, and August 24, 2001, and the results show that it can produce more efficiently at higher rates, thus preventing waste.
 - a. On an 9/64th inch choke, daily production averaged 42 barrels oil and 224 MCF, for a gas/oil ratio of 5333 cubic feet per barrel.
 - b. On a 10/64th inch choke, daily production rates increased to 49 BO and 305 MCF, for a gas/oil ratio of 6224 cubic feet per barrel.
 - c. When the choke size was increased to 11/64th inches, the gas/oil ratio decreased to 4786 cubic feet per barrel, but then began increasing. The corresponding average daily gas and oil rates on this choke size were 56 BO and 268 MCF.
 - d. When the choke was increased to 12/64th inches, the well was best able to unload liquid and the gas/oil ratio began decreasing to less than 4800 cubic feet/barrel. The daily production rates on this choke size averaged 81 BO and 422 MCF.
- 8. Requiring the well to stay within its current daily gas limit of 222 MCF will not increase the well's ultimate oil recovery.
- 9. This is the only well in the field and requiring it to make up overproduction will not prevent waste nor 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. Granting increased gas oil ratio authority for the M. Scanio Lease Well No. 3 will prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that increased net gas/oil ratio authority, with a daily gas limit of 400 MCF, be approved for Cummins & Walker Oil Company's M. Scanio Lease Well No. 3, Refugio-Fox (6500) Field, Refugio Field, Refugio County, Texas. All overproduction for this well should also be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: September 20, 2001