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**THE APPLICATION OF PURE RESOURCES FOR INCREASED GAS-OIL RATIO  
AUTHORITY FOR ITS O'CONNOR-MILLER LEASE, WELL NO. 2, EL TORO MAX (AY-  
3 SEG B) FIELD, JACKSON COUNTY, TEXAS**

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

**Procedural history**

Application received: August 3, 2001

Hearing held: October 18, 2001

**Appearances**

Rex Morris

Representing

Pure Resources

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Pure Resources wants to produce its O'Connor-Miller Lease Well No. 2, El Toro Max (AY-3 Seg B) Field, Jackson County, Texas, under increased gas-oil ratio authority, with a daily gas limit of 700 MCF. Pure Resources also requests that the overproduction for this well be canceled.

**DISCUSSION OF THE EVIDENCE**

The Pure Resources O'Connor-Miller Well No. 2 was the discovery well for the El Toro Max (AY-3 Seg B) Field. The discovery well was completed in March of 1998 and is still the only well in the field. Only one well is necessary to drain this small Yegua structure. The subject well was perforated from 10,820 to 10,849 feet and its initial test rate was 268 BOPD and 1106 MCF/D. The oil gravity is 50.1 degrees API and the applicant believes the field is close to being a retrograde condensate reservoir. The gas/oil ratio has remained about the same however, which would be unusual for a gas condensate reservoir.

The yardstick allowable is 212 BOPD and 424 MCF/D. The subject well's oil allowable is penalized to 152 BOPD due to high gas/oil ratio, though the well is producing about 5000 BO per month. Cumulative production is 146,000 BO and 601 MMCF of gas. The well's oil overproduction is 9777 BO and its gas overproduction is 38,554 MCF as of the September 1, 2001 balancing date. This is the only active well in the subject field and requiring it to make up this overproduction would not protect correlative rights.

The well was step-rate tested between August 27 and September 25, 2001. On an 18/64th inch choke, daily production averaged 120 barrels oil and 700 MCF, with a gas/oil ratio of 5833 cubic feet per barrel. On a 9/64th inch choke, the well produced about its current daily gas allowable but there was no improvement in the gas/oil ratio. The daily production rates decreased to 67 BO and 400 MCF, for a gas/oil ratio of 5970 cubic feet per barrel. On an intermediate choke of 9.5/64th inches, the gas/oil ratio stayed about the same at 5982 cubic feet per barrel. The corresponding average daily gas

and oil rates on this choke size were 84 BO and 500 MCF.

**FINDINGS OF FACT**

1. Notice of this hearing was issued to Pure Resources, the only operator of record in the El Toro Max (AY-3 Seg B) Refugio-Fox (6500) Field on July 20, 2001.
2. The El Toro Max (AY-3 Seg B) oil field was discovered in 1998.
3. The Pure Resources O'Connor-Miller Well No. 2 was the discovery well for the field and is still the only well in the field.
4. The subject well's perforations are from 10,820 to 10,849 feet and its initial test rate was 268 BOPD and 1106 MCF/D.
5. This well's cumulative production is 146,000 BO and 601 MMCF, of which 9777 BO and 38,554 MCF of gas is overproduction.
6. Statewide rules specify an allowable of 212 BOPD with a daily gas limit of 424 MCF for oil wells at this depth.
7. The subject well was step-rate tested between July 29, and August 24 and September 25, 2001, and the results show that it can produce efficiently at higher gas rates.
  - a. On an 18/64th inch choke, the well produced at the requested daily gas rate of 700 MCF. Oil production averaged 120 barrels per day, for a gas/oil ratio of 5833 cubic feet per barrel.
  - b. On a 9/64th inch choke, the well produced near its current daily gas allowable of but there was no improvement in the gas/oil ratio. The daily production rates decreased to 67 BO and 400 MCF, for a gas/oil ratio of 5970 cubic feet per barrel.
  - c. On an intermediate choke of 9.5/64th inches, the gas/oil ratio stayed about the same at 5982 cubic feet per barrel. The corresponding average daily gas and oil rates on this choke size were 84 BO and 500 MCF.
8. Requiring the well to stay within its current daily gas limit of 424 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. Requiring the O'Connor-Miller Lease Well No. 2 to produce within its current yardstick allowable will not prevent waste nor 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 700 MCF, be approved for Pure Resources' O'Connor-Miller Lease Well No. 2, El Toro Max (AY-3 Seg B) Field, Jackson County, Texas. All overproduction for this well should also be canceled.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner

Date of Commission Action: November 20, 2001