

**OIL AND GAS DOCKET NO. 02-0231431**

---

**THE APPLICATION OF ACOCK/ANAQUA OPERATING CO. LC FOR INCREASED GAS-OIL RATIO AUTHORITY FOR ITS THOMAS O'CONNOR LEASE, WELL NO. 14, GRETA (5800) FIELD, REFUGIO COUNTY, TEXAS**

---

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

**Procedural history**

Application received: May 16, 2002

Hearing held: July 2, 2002

**Appearances**

Dale Miller

Keith Lilie

Representing

Acock/Anaqua Operating Co., LC

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Acock/Anaqua Operating wants to produce its Thomas O'Connor Lease Well No. 14, Greta (5800) Field, Refugio County, Texas, under increased gas-oil ratio authority, with a daily gas limit of 600 MCF. Acock/Anaqua Operating also requests that the overproduction for this well be canceled.

**DISCUSSION OF THE EVIDENCE**

The Acock/Anaqua Operating O'Connor-Miller Well No. 14 is the only well in the Greta (5800) Field. The field was discovered in 1963, and the subject well, completed in January of 2002, is the first well in the field in many years. The subject well was perforated in a thin sand from 5801' to 5808' and its initial test rate was 41 BOPD and 329 MCF/D. The gas/oil ratio has already increased and is expected to continue to increase.

The Statewide allowable is 102 BOPD and 204 MCF/D, and the subject well's oil allowable is penalized to 25 BOPD, due to high gas/oil ratio. Cumulative production is 3022 BO and 42 MMCF of gas. As of June 1, 2002, the well has 23,400 MCF of overproduction.

The well was step-rate tested between June 1 and 27, 2002. On an 18/64th inch choke, daily production averaged 20 barrels oil and 457 MCF, for a gas/oil ratio of 24,550 cubic feet per barrel. On a 16/64th inch choke, the well averaged 18 barrels oil and 360 MCF, for a gas/oil ratio of 26,911 cubic feet per barrel. The well began loading on the 16/64th inch choke, showed by the decrease in the flowing tubing pressure from 390 psi to 365 psi. The well continued loading up on a 14/64th inch choke, where the average daily production rates decreased to 9 BO and 265 MCF, for a gas/oil ratio of 34,371 cubic feet per barrel. The well produced near its allowable on an 11/64th inch choke. The average rates on this choke were 149 MCF and 4 BOPD, the gas/oil ratio increased to 35,574 cubic feet per barrel, and the flowing tubing pressure decreased to 250 psi.

The applicant is requesting a daily gas limit of 600 MCF because the gas/oil ratio will continue

to increase. This is the only active well in the subject field and requiring it to make up its overproduction would not protect correlative rights.

**FINDINGS OF FACT**

1. Notice of this hearing was issued to Acock/Anaqua Operating, the only operator of record in the Greta (5800) Field on June 14, 2002.
2. The Greta (5800) Field was discovered in 1963, and the subject well is the first well in this field in many years.
3. The Acock/Anaqua Operating Thomas O'Connor Well No. 14 was completed in January, 2002, and is the only well in the field.
4. The subject well's perforations are from 5801' to 5808' and its initial potential was 41 BOPD and 329 MCF/D.
5. This well's cumulative production is 3022 BO and 42 MMCF, and the well has accumulated 23,400 MCF of gas overproduction.
6. Statewide rules specify an allowable of 102 BOPD with a daily gas limit of 204 MCF for oil wells at this depth.
7. The subject well was step-rate tested between June 1 and 27, 2002, and the results show that it can produce efficiently at higher gas rates.
  - a. On an 18/64th inch choke, the well averaged 20 BO and 457 MCF per day at a flowing tubing pressure of 386 psi. The gas/oil ratio was 24,550 cubic feet per barrel.
  - b. On an 16/64th inch choke, the well averaged 18 BO and 360 MCF per day, while the flowing tubing pressure decreased to 365 psi. The gas/oil ratio was 26,911 cubic feet per barrel.
  - c. On an 14/64th inch choke, the well averaged 9 BO and 265 MCF per day, at a flowing tubing pressure of 355 psi. The gas/oil ratio was 34,371 cubic feet per barrel.
  - d. On an 11/64th inch choke, the well produced near its current daily gas allowable but the gas/oil ratio increased to 35,574. The daily production rates decreased to 5 BO and 149 MCF, and the flowing tubing pressure decreased to 250 psi.
8. Requiring the well to stay within its current daily gas limit of 204 MCF may decrease 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 Thomas O'Connor Lease Well No. 14 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 600 MCF, be approved for Acock/Anaqua Operating Thomas O'Connor Lease Well No. 14, Greta (5800) Field, Refugio County, Texas. All overproduction for this well should also be canceled.

Respectfully submitted,

Margaret Allen  
Technical Hearings Examiner

Date of Commission Action: August 6, 2002