

THE APPLICATION OF TEXAS AMERICAN RESOURCES COMPANY TO CONSIDER AN INCREASED NET GAS-OIL RATIO AUTHORITY AND AN MER FOR THE KIRBY LUMBER CO "C" NO. 12, CLEVELAND FIELD, LIBERTY COUNTY, TEXAS

Heard by: Donna K. Chandler on October 25, 2000

Appearances:

Flip Whitworth
Don Charbula

Representing:

Texas American Resources

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Texas American Resources Company requests approval of an MER of 450 BOPD and increased net gas-oil ratio authority with a daily gas limit of 1,500 MCFD for its Kirby Lumber Co. "C" No. 12 in the Cleveland Field. In addition, it is requested that all overproduction for the subject well be canceled.

The application is unopposed and the examiner recommends approval of the requested MER, net gas-oil ratio authority and cancellation of overproduction. Texas American had initially requested similar relief for the No. 36 well on the lease but withdrew this request at the hearing.

DISCUSSION OF EVIDENCE

The Cleveland Field was discovered in 1933 at a depth of approximately 5,900 feet. Production is from the Yegua sands. The current allowable in the field is 62 BOPD; the casinghead gas limit is 1,000 MCFD per well based on a previous Commission order.

The Kirby Lumber Co. "C" No. 12 was completed by Gulf Oil Co. in 1935 and has produced over 950,000 BO from perforations between 5,721 and 5,731 feet. The No. 12 well is the only well in the field producing from the Yegua "A". Average porosity of the Yegua "A" in the No. 12 is 33% and average water saturation is 35%. Average permeability is 1,250 md.

Texas American took over operations of the well in 1998. The well had been on rod pump for many years prior to that. Texas American installed new tubing in the well in March 2000 and laid a separate flow line from the No. 12 well to the tank battery. With reduced back pressure, the well started to flow. In July 2000, the well was shut-in and gas lift equipment was installed.

However, the well has continued to flow and gas lift has not yet been required.

The No. 12 was tested at various rates during September-October to determine rate sensitivity. The well was initially produced at an average rate of 400 BOPD, 1,050 MCFD and 1,425 BWPD. The producing gas-oil ratio averaged 2,650 cubic feet per barrel. The rate was then reduced to approximately 335 BOPD, 820 MCFD and 1,300 BWPD, with a gas-oil ratio of 2,450 cubic feet per barrel. The lowest test rate was approximately 240 BOPD, 450 MCFD and 800 BWPD, with a gas-oil ratio of 1,900 cubic feet per barrel. Oil cut remained constant at 21-22%, regardless of producing rate.

The test data show that a somewhat lower gas-oil ratio can be obtained at lower producing rates. However, waste will not occur as a result of producing the well at the requested higher rate. This field has a very strong water drive which has allowed reservoir pressure to drop only 10 psi since 1946. The gas production from this last well in the reservoir will not affect ultimate recovery. The highest test rate was 1,190 MCFD with 438 BOPD and 2,717 BWPD. Texas American believes that gas production may be up to 1,500 MCFD and requests that the well be assigned the higher gas limit so that the well will not have to be shut in for overproduction.

The subject lease is overproduced approximately 22,000 BO and 25,000 MCF of gas. It is requested that all overage be canceled.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
2. The Cleveland Field was discovered in 1933 at a depth of approximately 5,900 feet. The current allowable in the field is 62 BOPD; the casinghead gas limit is 1,000 MCFD per well based on a previous Commission order.
3. The Kirby Lumber Co. "C" No. 12 was completed by Gulf Oil Co. in 1935 and has produced over 950,000 BO. It is the only well in the field producing from the Yegua "A".
4. The subject well was on rod pump for many years prior to March 2000 when Texas American performed a workover on the well and it began to flow.
5. Producing at rates up to 450 BOPD and 1,500 MCFD will not cause waste.
 - a. The oil cut remains constant at 21-22% when producing rates range from 240 BOPD, 450 MCFD and 800 BWPD to 400 BOPD, 1,050 MCFD and 1,425 BWPD.

- b. The gas-oil ratio is slightly lower at reduced rates. However, the field has a very strong water drive and gas production from this last well in the reservoir will not affect ultimate recovery.
6. The subject lease is overproduced approximately 22,000 BO and 25,000 MCF of gas.

CONCLUSIONS OF LAW

1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
3. Approval of an MER of 450 BOPD, net gas-oil ratio authority with a daily gas limit of 1,500 MCFD and cancellation of overproduction for the Kirby Lumber Co. "C" lease in the Cleveland Field will not cause waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of an MER of 450 BOPD, net gas-oil ratio authority with a daily gas limit of 1,500 MCFD and cancellation of overproduction for the Kirby Lumber Co. "C" lease in the Cleveland Field.

Respectfully submitted,

Donna K. Chandler
Technical Examiner