

THE APPLICATION OF EOG RESOURCES, INC. FOR INCREASED NET GAS OIL AUTHORITY FOR ITS LOCKHART 58 WELL NO. 2 IN THE SPARKS (TONKAWA) FIELD, HEMPHILL COUNTY, TEXAS

Heard by: Donna K. Chandler on May 16, 2001

Appearances:

Flip Whitworth
Rick Johnston

Representing:

EOG Resources, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

EOG Resources, Inc. requests increased net GOR authority for its Lockhart 58 No. 2 in the Sparks (Tonkawa) Field. EOG requests a daily gas limit of 1,250 MCFD and cancellation of all accumulated overproduction for this lease.

This application was unopposed and the examiner recommends approval of the increased net gas-oil ratio authority with a casinghead gas limit of 1,250 MCFD and cancellation of overproduction.

DISCUSSION OF EVIDENCE

The Sparks (Tonkawa) Field was discovered in 1965 at a depth of approximately 7,500 feet. There are 13 producing oil wells in the field. The top allowable is 353 BOPD, which was an MER adopted in 1966.

EOG completed its Lockhart 58 No. 2 in January 2001 with an initial potential of 510 BOPD and 2,117 MCFD, with a gas-oil ratio of 4,151 cubic feet per barrel. All of the leases in the field have gas-oil ratios in excess of 2,000 cubic feet per barrel, some as high as 20,000 cubic feet per barrel.

The Lockhart 58 No. 2 is perforated in two separate porosity intervals, from 7,656 to 7,684 feet and from 7,730 to 7,738 feet. The Lockhart 58 No. 2 is the first well in the field to have the lower porosity interval present.

EOG tested the subject well during April and May 2001. The producing rate was varied between 117 BOPD and 284 BOPD. The producing gas oil ratios varied between 3,850 MCFD and 6,600 MCFD. There was not obvious relationship between producing rate and gas oil ratio. At the lowest rate, gas-oil ratio varied between 4,500 and 7,500 cubic feet per barrel. At the highest rate, the gas-oil ratio varied between 5,500 and 7,900 cubic feet per barrel. The lowest average gas-oil ratio occurred at an average producing rate of 284 BOPD and 1,093 MCFD, where the average ratio was 3,854 cubic feet per barrel. At the current gas limit of approximately 700 MCFD, the gas-oil ratio was approximately 5,700 cubic feet per barrel.

The subject lease is overproduced approximately 16,500 MCF of gas and 7,255 BO through April 2001. EOG requests that this 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 Sparks (Tonkawa) Field was discovered in 1965 at a depth of approximately 7,500 feet. The top allowable is 353 BOPD and 706 MCFD.
3. The Lockhart 58 No. 2 was completed in January 2001 with an initial potential of 510 BOPD and 2,117 MCFD, with a gas-oil ratio of 4,151 cubic feet per barrel.
4. All of the leases in the field have gas-oil ratios in excess of 2,000 cubic feet per barrel, some as high as 20,000 cubic feet per barrel.
5. The Lockhart 58 No. 2 is perforated in two separate porosity intervals, from 7,656 to 7,684 feet and from 7,730 to 7,738 feet. The Lockhart 58 No. 2 is the first well in the field to have the lower porosity interval present.
6. The Lockhart 58 No. 2 is not rate sensitive.
 - a. During testing, the oil rate was varied between 117 BOPD and 284 BOPD and the producing gas oil ratios varied between 3,850 MCFD and 6,600 MCFD, with no obvious relationship between rate and gas-oil ratio.
 - b. The lowest average gas-oil ratio occurred at an average producing rate of 284 BOPD and 1,093 MCFD, where the average ratio was 3,854 cubic feet per barrel.
 - c. At the current gas limit of approximately 700 MCFD, the gas-oil ratio was approximately 5,700 cubic feet per barrel.

7. The subject lease is overproduced approximately 16,500 MCF and 7,255 BO.

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 increased net gas-oil ratio authority with a casinghead gas limit of 1,250 MCFD for the Lockhart 58 No. 2 in the Sparks (Tonkawa) Field and cancellation of overproduction will not cause waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Lockhart 58 No. 2 in the Sparks (Tonkawa) Field be authorized to produce under net gas-oil ratio authority with a daily gas limit of 1,250 MCFD and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Donna K. Chandler
Technical Examiner