

OIL AND GAS DOCKET NO. 08-0268194

THE APPLICATION OF RANGE PRODUCTION COMPANY TO CONSIDER AN INCREASED NET GAS OIL RATIO AUTHORITY FOR THE POWELL 11A LEASE, WELL NO. 1R, COBRA (WOLFCAMP) FIELD, GLASSCOCK COUNTY, TEXAS

HEARD BY: Andres J. Trevino P.E., Technical Examiner

HEARING DATE: January 25, 2011

APPEARANCES:

REPRESENTING:

John F. Miller

Range Production Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Range Production Company ("Range") requests approval of an increased net gas oil ratio authority with a casinghead gas limit of 2,000 MCFGPD for its Powell 11A Lease, Well No. 1R, in the Cobra (Wolfcamp) Field. At the hearing, Range withdrew its request for an MER allowable, as the well could no longer produce above the field top allowable. Range also requests that all overproduction for the lease be canceled.

The application is unopposed and the examiner recommends approval of the requested increased net gas oil ratio authority and cancellation of the lease overproduction.

DISCUSSION OF EVIDENCE

The Powell 11A Lease, Well No. 1R, was completed in the Cobra (Wolfcamp) Field in May 2010 with perforations between 7,914 feet and 7,924 feet. The well was completed as a replacement well for the Powell 11A, Well No. 1 which had a casing failure. The original Well No. 1 had produced over 1 MMBO in ten years and was producing at a rate of 200 BOPD when the casing failed. The Well No. 1R is located approximately 71 feet from the Well No. 1. On initial test, the well produced on a 40/64" choke at a rate of 225 BOPD and 133 MCFGPD. The top allowable in the field is 353 BOPD with an allowable gas oil ratio of 2,000 cubic feet per barrel and a casinghead gas limit of 706 MCFGPD. There are 41 wells carried on the oil proration schedule.

The Cobra (Wolfcamp) Field is a solution gas drive reservoir. In December 2010, Range tested the well to determine its rate sensitivity. The average test results are summarized as follows:

<u>CHOKE SIZE</u>	<u>OIL RATE</u>	<u>GAS RATE</u>	<u>GAS-OIL RATIO</u>
24/64"	92 BOPD	731 MCFGPD	7,969 cuft/bbl
30/64"	106 BOPD	620 MCFGPD	5,865 cuft/bbl
42/64"	205 BOPD	949 MCFGPD	4,626 cuft/bbl
48/64"	266 BOPD	1,240 MCFGPD	4,643 cuft/bbl
64/64"	295 BOPD	1,370 MCFGPD	4,675 cuft/bbl

The testing indicates that the well produces more efficiently at higher oil rates. The gas oil ratio varied indirectly with the oil rate. As the oil rate increased the gas-oil ratio decreased. The gas-oil ratio varied from 4,626 cubic feet per barrel to 7,969 cubic feet per barrel. During the testing through a 64/64" choke, the well produced 295 BOPD with a gas-oil ratio of 4,675 cubic feet per barrel. On the smallest choke size (24/64"), the well produced with the highest gas-oil ratio of 7,969 cubic feet per barrel.

Past production data demonstrates the Well No. 1R has produced casinghead gas at rates as high as 2,000 MCFGPD. As a result of the testing and past production history, Range requests an increased net gas oil ratio authority with a casinghead gas limit of 2,000 MCFGPD. Due to the assigned penalized oil allowable of 127 BOPD, through November 2010, the Powell 11A Lease was overproduced by 34,069 BO and 172,648 MCFG. Range also requests that all of the 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. In April 2010, the Powell 11A Lease, Well No. 1R, was drilled as a replacement well for the Powell 11A , Well No. 1 which had a casing failure.
3. The Powell 11A Lease, Well No. 1R, was completed in the Cobra (Wolfcamp) Field in April 2010 with perforations between 7,914 feet and 7,924 feet.
4. The top allowable in the field is 353 BOPD with an allowable gas oil ratio of 2,000 cubic feet per barrel and a casinghead gas limit of 706 MCFGPD. There are 41 wells carried on the oil proration schedule.
5. The Cobra (Wolfcamp) Field is a solution gas drive reservoir.
6. In December 2010, Range tested the well to determine its rate sensitivity. The well is rate sensitive and produces more efficiently at higher oil rates.
 - a. During the testing through a 64/64" choke, the well produced 295 BOPD with a gas-oil ratio of 4,675 cubic feet per barrel.

- b. The gas oil ratio varied indirectly with the oil rate. As the oil rate increased the gas-oil ratio decreased. The gas-oil ratio varied from 4,626 cubic feet per barrel to 7,969 cubic feet per barrel.
 - c. On the smallest choke size (24/64"), the well produced with the highest gas-oil ratio of 7,969 cubic feet per barrel.
7. Through November 2010, the Powell 11A Lease was overproduced by 34,069 BO and 172,648 MCFG.

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 increased net gas oil ratio authority with a casinghead gas limit of 2,000 MCFGPD and cancellation of the over production for the Powell 11A Lease, Well No. 1R, in the Cobra (Wolfcamp) Field will prevent waste and will not harm correlative rights.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends approval of the increased net gas oil ratio authority and cancellation of the lease over production, as requested by Range Production Company.

Respectfully submitted,

Andres J. Trevino P.E.
Technical Examiner