

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

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**HEARD BY:** Richard D. Atkins, P.E. - Technical Examiner

**HEARING DATE:** July 16, 2009

**APPEARANCES:**

John F. Miller

**REPRESENTING:**

Range Production Company

**EXAMINER'S REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Range Production Company ("Range") requests approval of an MER allowable of 650 BOPD and an increased net gas oil ratio authority with a casinghead gas limit of 2,500 MCFGPD for its Powell "11A" Lease, Well No. 1, in the Cobra (Wolfcamp) Field. Range also requests that all overproduction for the lease be canceled.

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

**DISCUSSION OF EVIDENCE**

The Powell "11A" Lease, Well No. 1, was completed in the Cobra (Wolfcamp) Field in December 2000 with perforations between 7,860 feet and 7,880 feet. On initial test, the well flowed on a 24/64" choke at a rate of 286 BOPD and 226 MCFGPD. The top allowable in the field is 353 BOPD with an allowable gas oil ratio of 2,000 cubic feet per barrel. There are 42 wells carried on the oil proration schedule.

The Cobra (Wolfcamp) Field has a depletion drive as the primary drive mechanism. In early 2007, the Powell "11A" Lease, Well No. 1, bottomhole pressure declined below the bubble point and the gas oil ratio began to increase. In May 2009, 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>
16/64"	140 BOPD	449 MCFGPD	3,422 cuft/bbl
24/64"	339 BOPD	1,690 MCFGPD	4,983 cuft/bbl
36/64"	535 BOPD	2,114 MCFGPD	3,953 cuft/bbl
64/64"	649 BOPD	2,332 MCFGPD	3,629 cuft/bbl

The testing indicates that the well produces more efficiently at higher oil rates. The gas oil ratio was fairly constant ranging only from 3,422 cubic feet per barrel to 4,983 cubic feet per barrel. During the testing through a 64/64" choke, the well produced 649 BOPD with a gas-oil ratio of 3,629 cubic feet per barrel. On the smallest choke size, the well began to load up with fluid, as the flowing tubing pressure became erratic and fluctuated between 180 psia and 30 psia.

As a result of the testing, Range requests an MER allowable of 650 BOPD and an increased net gas oil ratio authority with a casinghead gas limit of 2,500 MCFGPD. Through April 2009, the Powell "11A" Lease, Well No. 1, was overproduced by 67,023 MCFG. Range also requests that all of the lease 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 Powell "11A" Lease, Well No. 1 was completed in the Cobra (Wolfcamp) Field in December 2000 with perforations between 7,860 feet and 7,880 feet.
3. The top allowable in the field is 353 BOPD with an allowable gas oil ratio of 2,000 cubic feet per barrel. There are 42 wells carried on the oil proration schedule.
4. The Cobra (Wolfcamp) Field has a depletion drive as the primary drive mechanism.
5. In early 2007, the Powell "11A" Lease, Well No. 1, bottomhole pressure declined below the bubble point and the gas oil ratio began to increase.
6. In May 2009, 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 649 BOPD with a gas-oil ratio of 3,629 cubic feet per barrel.
  - b. The gas oil ratio was fairly constant ranging only from 3,422 cubic feet per barrel to 4,983 cubic feet per barrel.

- c. On the smallest choke size, the well began to load up with fluid, as the flowing tubing pressure became erratic and fluctuated between 180 psia and 30 psia.
7. Through April 2009, the Powell "11A" Lease, Well No. 1, was overproduced by 67,023 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 MER allowable of 650 BOPD and an increased net gas oil ratio authority with a casinghead gas limit of 2,500 MCFGPD and cancellation of the overproduction for the Powell "11A" Lease, Well No. 1, 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 MER allowable and increased net gas oil ratio authority and cancellation of the lease overproduction, as requested by Range Production Company.

Respectfully submitted,

Richard D. Atkins, P.E.  
Technical Examiner