

OIL AND GAS DOCKET NO. 7B-0260388

THE APPLICATION OF DOUBLE M PETROPROPERTIES, INC. TO CONSOLIDATE THE ROYSTON (CANYON) AND TOLAR (CANYON) FIELDS INTO THE KEELER-WIMBERLY (CANYON SD.) FIELD AND TO ADOPT THE MOST EFFICIENT RATE OF PRODUCTION AND INCREASED NET GAS-OIL RATIO AUTHORITY FOR THE KEELER-WIMBERLY (CANYON SD.) FIELD, FISHER COUNTY, TEXAS

Heard by: Richard D. Atkins, P.E. - Technical Examiner

Date of Hearing: January 12, 2009

Appearances:

Lloyd A. Muennink
J. Kyle Markey

Representing:

Double M Petroproperties, Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Double M Petroproperties, Inc. ("Double M") requests to consolidate the Royston (Canyon), Field ID No. 78819 500, and the Tolar (Canyon), Field ID No. 90383 250, Fields into the Keeler-Wimberly (Canyon SD.) Field, Field ID No. 48422 500.

In addition, Double M requests an MER of 110 BOPD and increased net gas-oil ratio authority with a casinghead gas limit of 500 MCFGPD for all wells in the Keeler-Wimberly (Canyon SD.) Field, Fisher County, Texas. Double M also requests that all accumulated overproduction be cancelled in the field.

The application is unopposed and the examiner recommends approval of the field consolidation, MER, increased net gas-oil ratio authority and cancellation of all field overproduction.

DISCUSSION OF THE EVIDENCE

The three Canyon Sand fields were discovered beginning in December 1952. The fields operate under various spacing rules, 20 acre density and have various allocation formulas. The fields are all classified as oil and are geographically intermingled. Double M requests to consolidate the Royston (Canyon) and Tolar (Canyon) Fields into the Keeler-Wimberly (Canyon SD.) Field. Double M presented a cross-section through wells located in the three fields which showed that all three fields are producing from the same Canyon Sand.

The Keeler-Wimberly (Canyon SD.) Field operates under rules for 20 acre density with a top allowable of 73 BOPD and an allowable gas-oil ratio of 2,000 cubic feet per barrel. There are 23 oil wells carried on the proration schedule. Double M operates three flowing oil wells that were drilled in 2008. However, Double M manages the field development and has the authority to represent all of the operators in the three fields. Cumulative production from the field through November 2008 is 1.08 MBO and 0.99 BCFG.

The gross pay section in the Keeler-Wimberly (Canyon SD.) Field is approximately eighty feet thick and the wells are perforated over the majority of the pay interval to enable the recovery of the maximum amount of oil reserves. The primary drive mechanism for the reservoir is a solution gas drive, which results in decreasing oil production, increasing gas production and higher well GORs.

In order to determine rate sensitivity, Double M tested four of the flowing wells from December 21, 2008 through January 8, 2009. In general, the tests showed that when the choke size was increased from 9/64ths of an inch up to 20/64ths of an inch, each well's GOR would decrease and the lowest GORs were obtained on the larger choke size.

The GOR for the Daniels Lease, Well No. 11, decreased from 5,000 down to 4,000. On a choke size of 20/64ths of an inch, the average daily rate was 46 BO and 189 MCFG.

The GOR for the Daniels Lease, Well No. 10, decreased from 3,400 down to 2,800. On a choke size of 14/64ths of an inch, the average daily rate was 106 BO and 305 MCFG.

The GOR for the Daniels Lease, Well No. 16, decreased from 4,000 down to 3,245. On a choke size of 14/64ths of an inch, the average daily rate was 94 BO and 305 MCFG.

The GOR for the Johnson "D" Lease, Well No. 1, decreased from 3,295 down to 2,450. On a choke size of 16/64ths of an inch, the average daily rate was 106 BO and 260 MCFG.

These examples clearly demonstrate that the most efficient rate to produce wells in this reservoir is at higher gas rates, which result in the lowest gas-oil ratio. In order to maximize production and prevent waste, Double M requests an MER of 110 BOPD and increased net gas-oil ratio authority with a casinghead gas limit of 500 MCFGPD be approved for the entire field. The requested rate is slightly higher than the actual test rates, but it will give flexibility in producing rates to keep the wells unloaded. This will also allow for the depletion of the reservoir without any reservoir damage and will increase the ultimate recovery from the field.

Double M also requests that all overproduction in the field be canceled.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. Double M requests to consolidate the Royston (Canyon) and Tolar (Canyon) Fields into the Keeler-Wimberly (Canyon SD.) Field.
3. The three Canyon Sand fields were discovered beginning in December 1952. The fields operate under various spacing rules, 20 acre density and have various allocation formulas. The fields are all classified as oil and are geographically intermingled.
4. Double M presented a cross-section through wells located in the three fields which showed that all three fields are producing from the same Canyon Sand. The gross pay section in the Keeler-Wimberly (Canyon SD.) Field is approximately eighty feet thick and the wells are perforated over the majority of the pay interval to enable the recovery of the maximum amount of oil reserves.
5. The primary drive mechanism for the reservoir is a solution gas drive, which results in decreasing oil production, increasing gas production and higher well GORs.
6. In order to determine rate sensitivity, Double M tested four of the flowing wells from December 21, 2008 through January 8, 2009.
 - a. The GOR for the Daniels Lease, Well No. 11, decreased from 5,000 down to 4,000. On a choke size of 20/64ths of an inch, the average daily rate was 46 BO and 189 MCFG.
 - b. The GOR for the Daniels Lease, Well No. 10, decreased from 3,400 down to 2,800. On a choke size of 14/64ths of an inch, the average daily rate was 106 BO and 305 MCFG.
 - c. The GOR for the Daniels Lease, Well No. 16, decreased from 4,000 down to 3,245. On a choke size of 14/64ths of an inch, the average daily rate was 94 BO and 305 MCFG.
 - d. The GOR for the Johnson "D" Lease, Well No. 1, decreased from 3,295 down to 2,450. On a choke size of 16/64ths of an inch, the average daily rate was 106 BO and 260 MCFG.
7. In general, the tests showed that when the choke size was increased from 9/64ths of an inch up to 20/64ths of an inch, each well's GOR would decrease and the lowest GORs were obtained on the larger choke size.

8. Approval of an MER of 110 BOPD and increased net gas-oil ratio authority with a casinghead gas limit of 500 MCFGPD will allow for the depletion of the reservoir without any reservoir damage and will increase the ultimate recovery from the field.
9. Cancellation of all overproduction in the field will not harm correlative rights.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was given to all persons legally entitled to notice.
2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
3. Approving an MER of 110 BOPD and increased net gas-oil ratio authority with a daily gas limit of 500 MCFGPD for each well and canceling overproduction in the Keeler-Wimberly (Canyon SD.) Field will not cause waste or harm correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends the consolidation of the Royston (Canyon) and Tolar (Canyon) Fields into the Keeler-Wimberly (Canyon SD.) Field. It is further recommended the approval of an MER of 110 BOPD and increased net gas-oil ratio authority with a daily gas limit of 500 MCFGPD for each well in the Keeler-Wimberly (Canyon SD.) Field and that all overproduction in the field be canceled.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Hearings Examiner