November 30, 2005

OIL AND GAS DOCKET NO. 7C-0244760

APPLICATION OF APPROACH OPERATING, INC. TO CONSIDER AMENDING THE FIELD RULES FOR THE OZONA, NE. (CANYON 7520) FIELD, CROCKETT AND SCHLEICHER, COUNTIES, TEXAS

HEARD BY: Thomas H. Richter, P.E. **DATE OF HEARING:** November 18, 2005

APPEARANCES: Michael E. McElroy, attorney

REPRESENTING:

Approach Operating, Inc.

Greg Cloud
William Dase (observer)

Railroad Commission of Texas

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Approach Operating, Inc. for the Commission to consider amending the field rules for the Ozona, NE. (Canyon 7520) Field as adopted in Order No. 7C-59,276, effective May 7, 1966, as amended, which provide for:

- 1. Minimum gas well spacing of 467'/933' (lease line/between well),
- 2. 320 acre gas proration units with 10% tolerance and maximum diagonal of 6,500' and optional 40 acre density and a maximum diagonal of 2,100'; and
- 3. An allocation formula based on 100% acreage. The allocation formula has been suspended since December 1, 1997.

Approach Operating proposes the following:

- 1. Minimum well spacing of 330'/660' (lease line/between well).
- 2. 320 acre gas proration units and with 10% tolerance and maximum diagonal of 6,500' optional 20 acre density and a maximum diagonal of 1,500';

3. No change in the allocation formula and continuation of suspension of the allocation formula.

At the subject hearing, Approached requested that the between well spacing be reduced from 933' to 660'. Notice of this hearing stated 330'/933'. Subsequent to the hearing, Approach notified and received waivers from the other operators that were noticed in the field: American Energy Partners, EnCana Oil & Gas, Mariposa Production, J. Cleo Thompson and Tidwell Production. The examiner recommends approval

DISCUSSION OF THE EVIDENCE

The Ozona, NE. (Canyon 7520) Field was discovered in 1966 at 7,520' subsurface depth. There are six operators in the field with 153 wells. Approach operates 77 of the wells. The field is classified as Non-Associated - 100% AOF and the allocation formula has been suspended since December 1, 1997.

Proration units of 320 acre/optional 20 acre density is necessary to provide for the efficient and effective depletion of the subject field. The Canyon 7520 is a thick (1200'), continuous sand across this entire area. The subject field started with 640 acre density and through the history of the fields life has proceeded to 320/optional 160's and the current 320/optional 40's.

Approached reviewed the initial G-1 SIWHP of the wells drilled each year since 1966. From 1966 through 1987, the average SIWHP ranged from 1,855 psia to 2,459 psia. In 2004, there were 44 wells drilled with an average SIWHP of 2,159 psia and in 2005 to the present, there have been 39 wells drilled with an average SIWHP of 2,053 psia. This is an indicator that there has been minimal pressure communication between the existing wells as currently spaced on optional 40 acre locations.

The oldest wells in the field with the most production history were drilled and are still operated by J. Cleo Thompson. Approach used Thompson's 59 wells to determine drainage areas. Volumetric analysis estimates the recoverable gas-in-place is 427 MCF/Ac-Ft assuming an 85% recovery factor. The estimated ultimate recoveries for the wells ranged from 92 MMCF to 1.67 BCF of gas. The net pay in the wells ranged from 17' to 120'. The drainage areas ranged from 3 acres to 81 acres. The number of wells draining more than 40 acres were 14 and the number of wells draining less than 40 acres were 45. The average ultimate recovery was 642 MMCF of gas for an average drainage area of 27 acres

The proposed minimum well spacing, 330'/660' (leaseline/between well), is necessary for flexibility in locating wells in the field and is the accepted spacing for 20 acre proration units.

FINDINGS OF FACT

1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing. Waivers from the other operators that were noticed in the field:

American Energy Partners, EnCana Oil & Gas, Mariposa Production, J. Cleo Thompson and Tidwell Production were submitted for the noticed between well spacing being reduced from 933' to 660'.

- 2. There was no protest at the call of the hearing.
- 3. The Ozona, NE. (Canyon 7520) Field was discovered in 1966 at 7,520' subsurface depth.
 - a. The field is classified as Non-Associated 100% AOF and the allocation formula has been suspended since December 1, 1997.
 - b. Field rules for the Ozona, NE. (Canyon 7520) Field as adopted in Order No. 7C-59,276, effective May 7, 1966, as amended, and provide for minimum gas well spacing of 467'/933' (lease line/between well), 320 acre gas proration units with 10% tolerance and maximum diagonal of 6,500' and optional 40 acre density and a maximum diagonal of 2,100'; and an allocation formula based on 100% acreage.
- 4. Proration units of 320 acre/optional 20 acre density is necessary to provide for the efficient and effective depletion of the subject field.
 - a. Approached reviewed the initial G-1 SIWHP of the wells drilled each year since 1966 and found that the pressures from 1966 through 1987 averaged from 1,855 psia to 2,459 psia. In 2004, there were 44 wells drilled with an average SIWHP of 2,159 psia and in 2005 to the present, there have been 39 wells drilled with an average SIWHP of 2,053 psia. This is an indicator that there has been minimal pressure communication between the existing wells as currently spaced on optional 40 acre locations.
 - b. The drainage area was determine on 59 wells and the drainage areas ranged from 3 acres to 81 acres. The number of wells draining more than 40 acres were 14 and the number of wells draining less than 40 acres were 45.
 - c. The average ultimate recovery was 642 MMCF of gas for an average drainage area of 27 acres
- 5. The proposed minimum well spacing, 330'/660' (leaseline/between well), is necessary for flexibility in locating wells in the field and is the accepted spacing for 20 acre proration units.

CONCLUSIONS OF LAW

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.

- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Consideration of field rules, a determination of their effectiveness and appropriate actions is a matter within the Commission jurisdiction.
- 4. Adoption of the proposed amended field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed amended field rules for the Ozona, NE. (Canyon 7520) Field as set out the attached order.

Respectfully submitted,

Thomas H. Richter, P.E. Technical Examiner Office of General Counsel