#### OIL AND GAS DOCKET NO. 06-0251010

# APPLICATION OF O'BENCO, INC. TO AMEND THE FIELD RULES FOR THE DARCO, S.E. (COTTON VALLEY) FIELD, HARRISON COUNTY, TEXAS

**HEARD BY**: Thomas H. Richter, P.E. **DATE OF HEARING:** April 19, 2007

APPEARANCES:

Dick Marshall, attorney Greg Cloud Rick Johnston **REPRESENTING:** O'Benco, Inc.

Comstock Oil & Gas

# EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of O'Benco, Inc. to amend the field rules as adopted in Order No. 6-73,864, effective October 15, 1979, as amended, for the Darco, S.E. (Cotton Valley) Field that currently provide for the following:

- 1. The entire combined correlative interval from 8,530' to 10,188' as shown on the Dual Induction Laterolog Borehole Compensated Sonic log of the Ensight Energy Management, LLC, Susan Harris GU 2 Lease Well No. 1, M. Duncan Survey, A-197 Harrison County, Texas, is designated as the Darco, S.E. (Cotton Valley) Field.
- 2. Minimum well spacing of 467'/1200' (lease line/between well);
- 3. 640 acre gas proration units plus 10% tolerance and a maximum diagonal of 11,000' and optional 80 acre density and a maximum diagonal of 3,500';
- 4. An allocation formula based on 100% acreage.

O'Benco proposes the following:

- 1. No change in designated interval.
- 2. Minimum well spacing of 467'/933';
- 3. The addition of optional 40 acre density and a maximum diagonal of 2,100.
- 4. No Change and the allocation formula remain suspended.

The examiner recommends approval of the application.

#### **DISCUSSION OF THE EVIDENCE**

The Darco, S.E. (Cotton Valley) Field was discovered in 1979 at a depth of 10,094' subsurface depth. The field is governed by special field rules as adopted by Order No. 6-73,864, effective October 15, 1979, as amended, that currently provide for minimum well spacing of 467'/1200' (lease line/between well), 640 acre gas proration units plus 10% tolerance and a maximum diagonal of 11,000' and optional 80 acre density and an allocation formula based on 100% acreage (adopted by Order No. 06-0236674 effective December 9, 2003). The allocation formula was suspended in October 1995. There are four operators in the field and 15 wells.

Optional 40 acre density is necessary to provide for the efficient and effective depletion of the reservoir. Eight new wells have been completed since 2006. Cumulative production from the field is 4.2 BCF of gas and 27,200 BC. The field's current daily production is 5,000 MCFD. Estimated recoveries for the wells in the field range from 194 MMCF to 2 BCF of gas. The estimated average ultimate recovery is 1 BCF per well. Assuming an average recovery of 1 BCF per well, the average drainage area is 36 acres per well (average recoverable gas-in-place 596 MCF/AcFt using an 81% recovery factor). Drainage area calculations were made on four wells to substantiate the need for optional 40 acre density. The estimated recoveries ranged from 553 MMCF to 1.47 BCF of gas. The estimated drainage areas ranged from 22 acres to 39 acres. The proposed optional 40 acre density is identical to other surrounding/adjacent Cotton Valley Fields in the area.

The proposed minimum well spacing, 467'/933' (leaseline/between well) is necessary to allow flexibility in locating wells in the reservoir to maximize pressure reduction in the recovery of gas and is the well spacing associated with 40 acre density.

No change is proposed in the allocation formula. To insure there is no limit imposed by proration, it is recommended suspension of the allocation formula be continued.

### 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.
- 2. There was no protest at the call of the hearing.
- 3. The Darco, S.E. (Cotton Valley) Field was discovered in 1979 at a depth of 10,094' subsurface depth.
  - a. The field is governed by special field rules as adopted by Order No. 6-73,864, effective October 15, 1979, as amended, that currently provide for minimum well spacing of 467'/1200' (lease line/between well), 640 acre gas proration units and optional 80 acre density and an allocation formula based on 100% acreage. The allocation formula was suspended in October 1995.

- b. There are four operators in the field and 15 wells.
- 4. The entire combined correlative interval from 8,530' to 10,188' as shown on the Dual Induction Laterolog Borehole Compensated Sonic log of the Ensight Energy Management, LLC, Susan Harris GU 2 Lease Well No. 1, M. Duncan Survey, A-197 Harrison County, Texas, should be designated as the Darco, S.E. (Cotton Valley) Field.
- 5. Optional 40 acre density is necessary to provide for the efficient and effective depletion of the reservoir.
  - a. Estimated recoveries for the wells in the field range from 194 MMCF to 2 BCF of gas and the average estimated ultimate recovery is 1 BCF per well.
  - b. Drainage area calculations were made on four wells to substantiate the need for optional 40 acre density.
  - c. The estimated recoveries ranged from 553 MMCF to 1.47 BCF of gas.
  - d. The estimated drainage areas ranged from 22 acres to 39 acres.
  - e. The proposed optional 40 acre density is identical to other surrounding/adjacent Cotton Valley Fields in the area.
- 6. The proposed minimum well spacing, 467'/933' (leaseline/between well) is necessary to allow flexibility in locating wells in the reservoir to maximize pressure reduction in the recovery of gas and is the minimum well spacing associated with 40 acre density.
- 7. To insure there is no limit imposed by proration, suspension of the allocation formula should be continued.

### **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 for field rules, a determination of their effectiveness and appropriate actions are 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 Darco, S.E. (Cotton Valley) Field.

Respectfully submitted,

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