#### OIL AND GAS DOCKET NO. 7C-0228484

## THE APPLICATION OF PRIZE OPERATING COMPANY FOR INCREASED GAS-OIL RATIO AUTHORITY FOR THE VELREX (WOLFCAMP) FIELD, SCHLEICHER COUNTY, TEXAS

**Heard by:** Margaret Allen, Technical Hearings Examiner

#### **Procedural history**

Application received: May 25, 2001 Hearing held: July 17, 2001

#### Appearances

Ben Nivens

Representing

Prize Operating Company

### **EXAMINER'S REPORT AND RECOMMENDATION**

### STATEMENT OF THE CASE

Prize Operating Company wants to produce the only well in the Velrex (Wolfcamp) Field, Schleicher County, Texas, under increased gas-oil ratio authority of 40,000 cubic feet per barrel. Prize also requests that the overproduction for this well be canceled. The examiner suggested that a daily gas limit of 475 MCF be adopted and the applicant agreed.

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

The Velrex (Wolfcamp) Field was discovered in 1982 and has field rules specifying 80 acres with an allowable of 171 BOPD and 342 MCF/D. The only well in the field is the Prize R.S. Williams 'A' No. 6, which Prize recompleted to the Wolfcamp in February of 2001. Well No. 6 was perforated between 5658 and 5689 feet, and its initial potential was 176 BOPD at a gas/oil ratio of 576 cubic feet per barrel.

The Wolfcamp formation consists of limestone with sandstone beds and an average porosity of 11%. This small reservoir has a depletion drive with no apparent gas cap and no known oil/water contact. The well produced 2000 BO during February but its producing rate has fallen rapidly and cumulative production through June 1, 2001, is only 8000 BO and 66 MMCF.

The well was step-rate tested between May 27 and June 30, 2001. On a full choke, daily production averaged 16 barrels oil and 448 MCF, for a gas/oil ratio of 28,000 cubic feet per barrel. When the choke size was decreased to 40/64th inches, the gas/oil ratio increased to 32,833 cubic feet per barrel. The average daily gas and oil rates dropped to 12 BO and 394 MCF, but not enough to comply with the well's allowable. The choke size was then decreased to 36/64th inches, and daily production rates decreased further to 9 BO and 341 MCF, for a gas/oil ratio of 37,889 cubic feet per barrel.

The well has accumulated overproduction since March, 2001, primarily because of its penalized oil allowable. This is the only active well in the subject field, and requiring it to make up this

## Oil & Gas Docket No. 7C-0228484

# FINDINGS OF FACT

- 1. Notice of this hearing was issued to operators of record in the Velrex (Wolfcamp) Field on June 25, 2001.
- 2. The Velrex (Wolfcamp) Field was discovered in 1982, but was inactive until the Prize R.S. Williams 'A' Well No. 6 was recompleted to the Wolfcamp in February of 2001.
- 3. The Velrex (Wolfcamp) Field has special rules specifying 80 acre units with daily allowables of 171 BO and 342 MCF.
- 4. The subject well was perforated from 5658 to 5689 feet, and its initial potential was 176 BOPD at a gas/oil ratio of 568 cubic feet per barrel.
- 5. The reservoir is apparently very small and the well only produced 8000 BO and 66 MMCF by June 1, 2001.
- 6. The reservoir had no apparent gas cap or known oil/water contact and the gas/oil ratio is increasing rapidly as reservoir pressure is being depleted.
- 7. The well was step-rate tested between May 27, and June 30, 2001, and the results show that it can produce more efficiently at higher rates, thus preventing waste.
  - a. On a full choke, daily production averaged 16 barrels oil and 448 MCF, for a gas/oil ratio of 28,000 cubic feet per barrel.
  - b. On a choke of 40/64th inches, daily production averaged 12 BO and 394 MCF, for a gas/oil ratio of 32,833 cubic feet per barrel.
  - c. On a choke of 36/64th inches, daily production rates decreased to 9 barrels of oil and 341 MCF, for a gas/oil ratio of 37,889 cubic feet per barrel.
- 8. Requiring the well to stay within its current daily gas limit of 342 MCF will not increase the well's ultimate oil recovery and will waste reservoir energy.
- 9. This is the only well in the field and requiring it to make up overproduction will not prevent waste nor protect correlative rights.

## **CONCLUSIONS OF LAW**

- 1. Proper notice was given as required by statute.
- 2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.

### Oil & Gas Docket No. 7C-0228484

3. Granting increased gas oil ratio authority for the only well in the Velrex (Wolfcamp) Field will prevent waste and protect correlative rights.

# **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that increased net gas/oil ratio authority, with a daily gas limit of 475 MCF, be approved for the Prize Operating Company R.S. Williams 'A' Lease Well No. 6 in the Velrex (Wolfcamp) Field, Schleicher County, Texas. All overproduction for this well should also be canceled.

Respectfully submitted,

Margaret Allen Technical Hearings Examiner

Date of Commission Action: August 7, 2001