

RESERVOIR DESCRIPTION

Field History

The West Corbin (Delaware) Field was discovered in September, 1976 with the completion of the Aztec Oil and Gas (now Burlington Resources) West Corbin #2. Delineating the Field took place mainly with the drilling of deeper Wolfcamp and Bone Spring wells. Development of the Delaware took place from 1990 to 1993.

There are 7 active producers and one active injector in the proposed Corbin Delaware Unit area. These seven wells are currently producing 98 BO + 62 MCF + 793 BW. The West Corbin #4 SWD is currently injecting 1,600 BWPD into the proposed unitized zone. Cumulative production and injection in the proposed unit area is 795 MBO + 759 MMCF + 3,112 MBW produced, and 2,726 MBW injected (as of 5/1/98).

Reservoir Data

The proposed unitized flood area is the east half of the West Corbin (Delaware) field. The east half of the West Corbin (Delaware) field received significant waterflood response from the water disposal operation on the West Corbin #4. The West Corbin #4 injected 2.7 MMBW into the proposed unitized zone from 1978 to present. The attached production curves have in some degree the common traits of pressure support.

The flood interval is found at an average depth of 5,000' and consists of three fine-grained sandstone lenses, separated above and below by impervious dolomites. The average porosity is 12% with a water saturation of 39%. The reservoir has a bottom hole temperature of 113° F, and produces a 37.0° API oil with a corresponding gas specific gravity of 0.946.

The original reservoir pressure was 1,924 psi. Current reservoir pressure is estimated to be 1,000 psi, well below the bubble point pressure of 1,719 psi. The solution GOR is 516 SCF/bbl with the current producing GOR being 633 SCF/bbl. As of May 1, 1998, the unit area has produced 795 MBO + 759 MMCF which calculates to be 28% of the OOIP

The various reservoir properties and values are attached on Exhibits 17 - 20.

Proposed Unit Boundary

The proposed CDU consists of 646 acres of Federal land located in sections 7, 17, and 18 of T-18-S, R-33-E, all in Lea County, New Mexico. A map with the proposed unit outline can be seen in Exhibit 1. The outline encompasses all productive pay that has been identified in the "Lower YZ", "A", and "B" sands.

BEFORE THE
OIL CONSERVATION DIVISION
Case No.12046&12047 Exhibit No.
Submitted By:
Burlington Resources
Hearing Date: September 17, 1998

