

Tres Canal Exploration Unit Description and Geologic Justification

Yates Petroleum Corporation is requesting the formation of the Tres Canal Exploration Unit to support the drilling of a wildcat exploratory well test to the Devonian located in the W/2 of Section 26 Township 8 South Range 33 East, in Chaves County, New Mexico. The unit will include the following lands as shown on Figure 1; Sections 23 (S/2), 25 (W/2), 26, 27, 34 and 35 T8S R33E. The primary objective of the proposed well will be gas productive Atoka-Morrow sandstones at depths between 10,500 feet and 11,500 feet measured depth. A secondary objective is Devonian oil at a depth of approximately 12,500 feet.

Atoka-Morrow sands have been identified in several deep wells in the area of the proposed unit and are expected to be gas productive, although no commercial production from the Atoka-Morrow has been established within ten miles of the proposed location. These sands are interpreted to have accumulated in channel type bodies in an alluvial plane depositional system during early Pennsylvanian time. The orientation of the depositional channels varied over time. Regional subsurface mapping indicates that the proposed exploratory test well lies within three probable depositional fairways for the Lower Morrow, Upper Morrow, and Upper Atoka sands. Figures 2, 3, and 4 are net sand isopachs for the Lower Morrow, Upper Morrow, and Upper Atoka respectively over the proposed unit area. Figure 5 is a stratigraphic cross-section hung on the top of the Morrow showing the distribution of these sands in the wells located to the south and west of the proposed unit well location. The deepest well within the unit outline is the Saxon Oil Crystal State #1 which was drilled to a depth of 9608 feet or approximately 1000 feet above the Atoka-Morrow sands.

The proposed unit outline encompasses an area where the probability of commercial discovery is interpreted to be greatest due to intersection of three major depositional channel systems. The formation of the proposed exploratory unit will aid in the reasonable development of the area in the event of a commercial discovery in the initial wildcat well, which is expected to commence drilling before 8/1/2000.