TEN MILE FEDERAL STATE EXPLORATORY UNIT CHAVES COUNTY, NEW MEXICO

The Ten Mile Federal State Exploratory Unit is located in Chaves County, New Mexico. The proposed unit is in Township 14S Range 28E. It consists of parts of sections 20 and 21, and all of sections 28,29,32, and 33.Yates Petroleum Corporation is forming this unit for the exploration for Morrow sands.

The two maps depict our proposed unit and our proposed location, which is 1,650' FNL & 1,650' FEL in 33-14S-28E. The Gross Isopach Map of the Morrow Clastics to Austin Cycle shows a Thick trending north-southeast. This Thick would have the best chance of encountering several sand-shale intervals as opposed to the Thins, which would not have a great amount of sands.

The Morrow Gross Sand Map depicts sands with < 50 API Gamma Ray units on the E-logs, which represent clean sands. These trend north-southeast and these thicker sands tend to follow the Thick-Thin Map which would represent the Thicks as the low areas and the Thins as the high areas. Sand-shale sequences would occur in the lows (Thicks) as opposed to the highs the (Thins).

The north-south (A-A') cross-section illustrates the Thick-Thin concept for the development of sands. The Dominion Stardust well in 3-15S-28E shows a 93 foot section of Morrow Clastics. This well has a 30 feet + of productive Morrow sand as opposed to either the Chi Energy's well to the northeast or Yates Petroleum's Buffalo Valley well to the west which have very little sands. Chi Energy's well only has 66 feet of Morrow Clastics and the Yates Petroleum's Buffalo Valley well only has 76 feet of Morrow Clastics as opposed to Dominion's well which has 93 feet of Morrow Clastics. As shown by this cross-section wells with the thicker Morrow Clastic sections enhance the possibility of encountering multiple sands.

Yates Petroleum's proposed location has the potential of having 130'+ of Morrow Clastics which would provide for multiple sand packages. The 20 foot or better contour on the Gross Sand Map <50 API Units would have productive economic sands.

> BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No. <u>12938</u> Exhibit No. 8 Submitted by: <u>YATES PETROLEUM CORPORATION</u> Hearing Date: <u>October 10, 2002</u>