



traps of sedimentary section under mantled volcanics, stratigraphic traps in the Pennsylvanian section and/or a Pennsylvanian erosion remnant, trapping hydrocarbons within the basin.

Under similar geological situations, this terrace area above the prolific hydrocarbon rich Sand Wash Basin, can contain similar potential as demonstrated by the shallow "Gramps" Field, where the wells have averaged over 200,000 barrels. The large mineral interest positions being offered will have minimum well permitting, and environmental constraints that could currently generate exploration drilling interest for hydrocarbons.

COAL

Coal potential is also confined to the basin sediments and has only been described in the

Mesaverde Formation, locally preserved in small areas (Figure 9). Mesaverde outcrops on the west edge of the TA Grant have been mined in nearby Monero, New Mexico for local consumption. The Mesaverde in the San Juan Basin is typically divided into three named units, in ascending order as follows: Point Lookout Sandstone, Menefee Formation and La Ventana Tongue of the Cliff House Sandstone. In the Chama area this threefold subdivision cannot be recognized because the coal bearing Menefee Formation pinches out northeast of the Monero coalfield (Muehlberger 1967). Bulletin 89, Geology of Chama Quadrangle, reports some 12 measured sections in the area with 3 sections describing the Mesaverde Formation. Only one coal is reported with approximately 5 feet in thickness in the Tecolote Mesa section on the west edge of the TA Grant (Figure 10). Other local sites 3 to 6 miles southeast of Tierra Amarilla