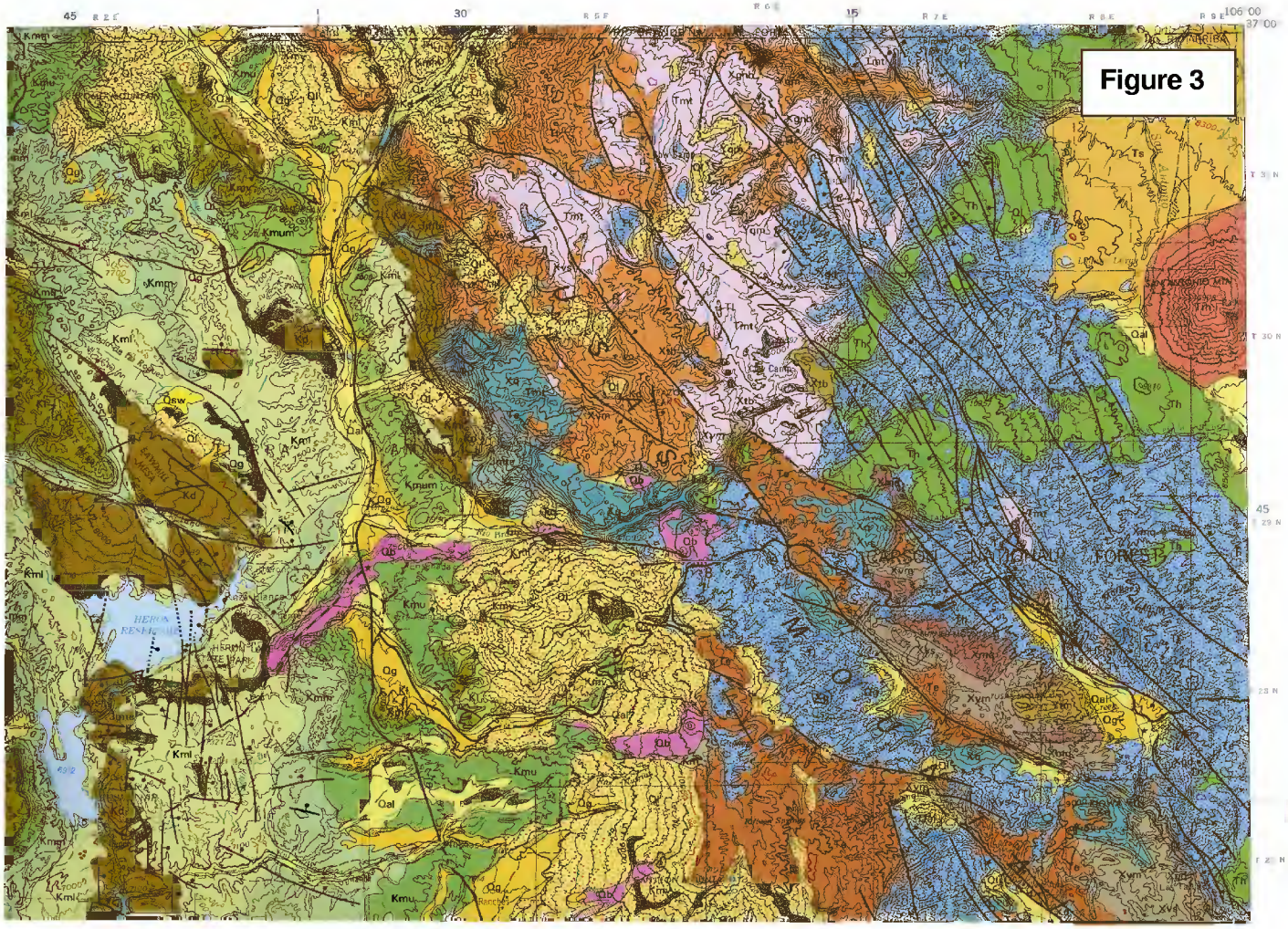
Manley, Scott and Wobus 1987



eastern margin of the San Juan Basin off the structural Archuleta Anticlinorium uplift that separates the Chama Basin from the San Juan Basin. Two nearby fields are named the "Puerto Chiquito" and "Boulder" Fields, producing oil from fractured Mancos Formation in structurally controlled reservoirs.

A simplified geologic map is used to look at the potential sedimentary section preserved and capable of trapping hydrocarbons (Figure 4). This sedimentary section consists of Pennsylvanian to Cretaceous rocks, which can be identified on the basin's eastern edge. Figures 5 and 6 represent composite stratigraphic columns of rock units exposed in the Chama Quadrangle and Chaves Box. The obvious potential reservoir rocks indicated in these columns are sandstones of the Dakota, Entrada and Pennsylvanian formations. Additional zones of interest, based on local production, could be fractured reservoirs, the Greenhorn limestone, erratic sandstone and siltstones of the Morrison and limestone in the Pennsylvanian section. The section from the base of the Dakota to Proterozoic rocks is about 1,800 feet in thickness. Along the eastern basin edge, on Figure 4, is a dashed boundary line indicating the approximate limit of sedimentary section capable of trapping hydrocarbons before leaking out to the outcrop. Mineral interest east of this line has no hydrocarbon potential. Figure 7 indicates the mineral interests expected to have hydrocarbon potential. Conventional prospect potential west of this line will be anticlines, faults and faulted anticlines with Dakota, Entrada and/or Pennsylvanian sandstones. Figure 8 illustrates these major potential structural features. Other more speculative prospects expected are fractured formation reservoirs, siltstones, angular unconformity