S.A. BOWRING, 1980 NMBMMR OF - 120
SOUTH BALDY

ECONOMIC GEOLOGY

This study area is unusual in that it lacks the abundant prospects and mines which characterize much of the Socorro-Magdalena area. Most of the prospects in this area are located near the northeast-trending Sawmill Canyon cauldron margin.

The only mine located in this study area is the Copper Lode patented claim (P. Allen, oral commun., 1978) which is located on Baldy Ridge at the extreme northern end of the study area (sec. 6, T.4S., R.4W.). The mine is located along a north-trending white rhyolite dike which intrudes the ring fracture of the Sawmill Canyon cauldron margin. A shaft estimated to be a minimum of 100 feet deep was sunk along the dike, however there is no sign of economic mineralization in the mine dumps; the Hells Mesa Tuff in the vicinity of the dike is highly silicified. Numerous shallow prospect pits and short adits are common in the Hells Mesa Tuff along the cauldron margin, however no significant mineralization is visible.

Small amounts of copper mineralization (malachite?) are found in several localities within the andesite that caps South Baldy. Several shallow pits are present on the south flank of South Baldy and a 30-foot adit is located along a north-trending fault zone in the saddle due east of South Baldy. Small amounts of malachite (?) which occurs as

fracture fillings may be found in the dumps of these prospects.

Hydrothermal veins formed largely of quartz and carbonate have been intruded along north-trending faults in the vicinity of South Baldy and immediately to the wet in sections 1 and 12 (T.4S., R.4W.). Typically, the veins consist of banded calcite and quartz with vugs which are filled with drusy minerals. The vein in section 1 and 12 has numerous small prospect pits dug on it, however there is no visible economic mineralization.

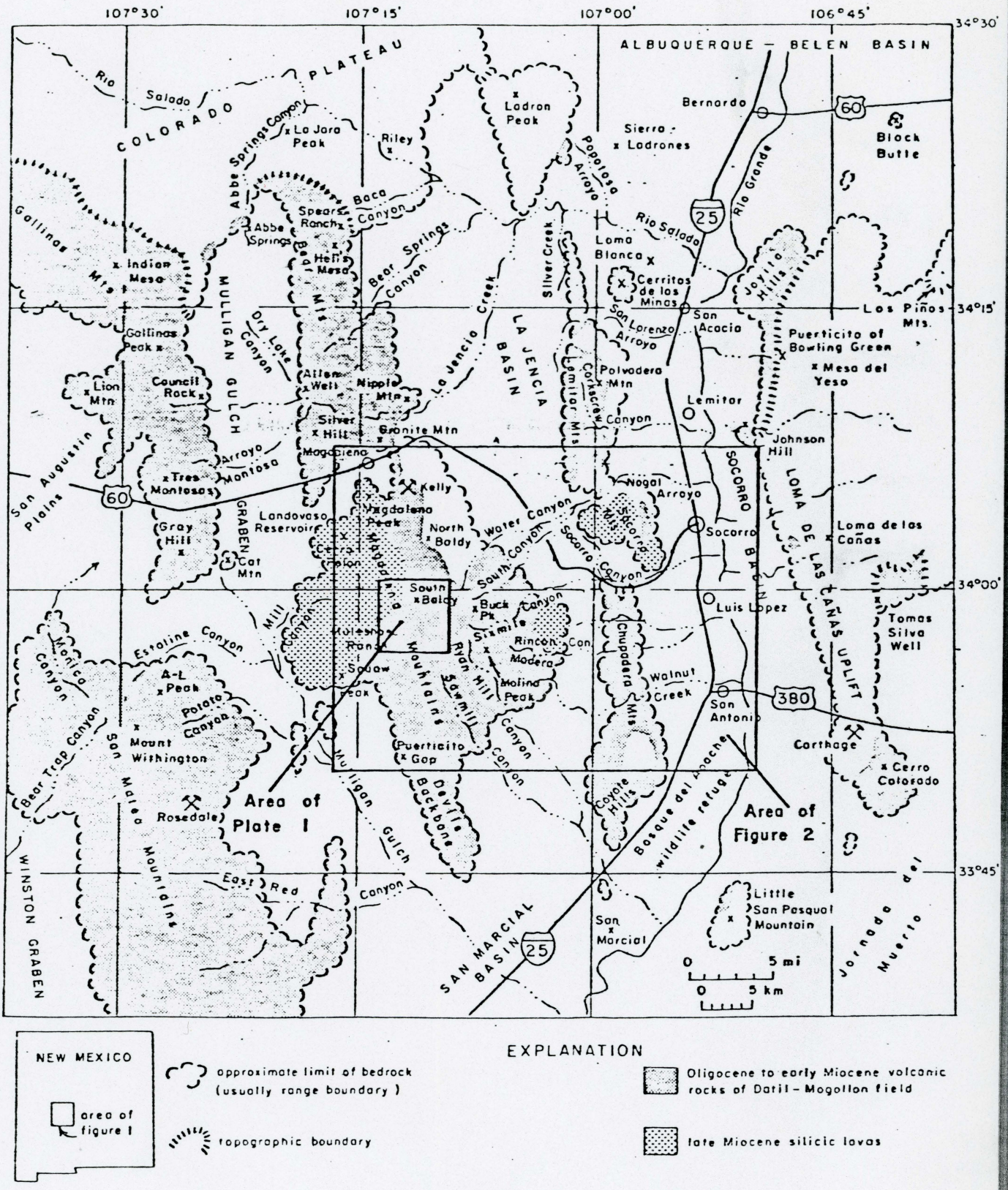

Figure 1. General location map showing the relationship of the study area to major mountain ranges and the distribution of Oligocene to Miocene rocks.