

STUDIES RELATED TO WILDERNESSES

The Wilderness Act, Public Law 88-577, September 3, 1964, and related acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resources. This report presents the results of a mine and prospect survey of the Manzano Wilderness, in the Cibola National Forest, Torrance and Valencia Counties, N. Mex. The Manzano Wilderness was established by Public Law 95-37 February 24, 1978.

INTRODUCTION

The U.S. Geological Survey and the U.S. Bureau of Mines conducted field investigations to evaluate the mineral resources of the Manzano Wilderness, Torrance and Valencia Counties, N. Mex., during 1980 and 1982. This map complements the mineral resource appraisal of the Manzano Wilderness (Maxwell and others, 1983). Field studies by the Bureau of Mines included a reconnaissance of mines, prospects, and mineralized areas. From workings within and near the wilderness, 107 samples were taken and analyzed.

The wilderness, 20-35 mi southeast of Albuquerque, N. Mex., consists of 37,000 acres in the Cibola National Forest (see index map). Most of the wilderness is the steep west-facing slope of the Manzano Mountains from Mues Peak to the north to Manzano Peak on the south.

Notices of the mining claim locations were examined in the Torrance County Courthouse in Batavia, N. Mex., and in the Valencia County Courthouse in Low Lumea, N. Mex. All claims which could be accurately plotted in and around the Manzano Wilderness are shown on this map. Many additional claims in the vicinity could not be plotted because of vague descriptions of location. Surface and underground workings in and around the Manzano Wilderness were examined and sampled. These workings are listed in table 1. A total of 107 samples were taken, including chip, grab, select, outcrop, stream-sediment, and stream pan-concentrate samples. Table 2 shows assay results for samples containing more than 0.005 oz gold per ton, 0.3 oz silver per ton, or 0.10 percent copper, lead, or zinc. Detailed sample descriptions and assay data for samples not listed in table 2 are available from the U.S. Bureau of Mines, International Field Operations Center, Denver, CO 80225.

The periphery of the Manzano Wilderness contains small deposits of gold, silver, and copper. Several properties in and around the southern half of the wilderness have been prospecting for minerals as metal prices have fluctuated. From 1915 to 1919, about 8,300 tons of ore containing 1,075,000 lb of copper and 6,700 oz of silver was mined from the Permian Abo Formation south of the wilderness near Schulte, N. Mex. (Lasker, 1932). Workings in and around the wilderness occur in the Bartolo Canyon area, the Cañon de Salas area, the Cañon Monte de Abajo area, and the Priest Canyon area.

BARTOLO CANYON AREA

Workings in the Bartolo Canyon area consist of three adits driven 45, 177, and 18 ft (figs. 1-3), and several prospect pits (fig. 4). Numerous quartz veins across faults in the workings contained anomalously high amounts of gold, silver, or copper (table 2). Sample 44 contained 0.372 oz gold per ton, 4.0 oz silver per ton, 0.65 percent copper, and 1.45 percent lead.

CAÑON DE SALAS AREA

One mile north of the adits in Bartolo Canyon, there is a 20-ft-long open cut and a 10-ft-long adit in Cañon de Salas (fig. 5) in the NW 1/4 sec. 24, T. 5 N., R. 4 E. (unsurveyed). The adit was driven to intersect a northeast-trending fault containing minor pyrite, galena, and some copper staining. None of the three samples from this area contained any anomalous concentrations of metals.

CAÑON MONTE DE ABAJO AREA

About 1 mi north of Cañon Monte de Abajo, between Cañon Monte Largo and Cañon Monte de Abajo, are the Cordova prospect and an unnamed adit 0.7 mi to the east. The Cordova prospect (fig. 6) consists of two trenches and a flooded shaft. Two samples from these workings contained 0.4 oz silver per ton, but no other elements in anomalous amounts.

THE ADIT IN THE NW 1/4 SEC. 12, T. 4 N., R. 4 E.

The adit in the NW 1/4 sec. 12, T. 4 N., R. 4 E. (unsurveyed) contains 210 ft of underground workings (fig. 7). Several samples contained anomalously high amounts of copper, the maximum being 0.84 percent (table 2).

THE ADIT IN THE SE 1/4 SEC. 20, T. 4 N., R. 5 E.

Two adits and two open cuts have been worked in the Priest Canyon area in secs. 20, 21, and 28, T. 4 N., R. 5 E. (figs. 8-11). These workings are all in an area of anomalously high concentrations of silver from the Permian Abo Formation, an arkosic sandstone. Copper content reaches a maximum of 4.40 percent in a select sample from the Copper Girl adit in the SE 1/4 sec. 20, T. 4 N., R. 5 E. (fig. 10).

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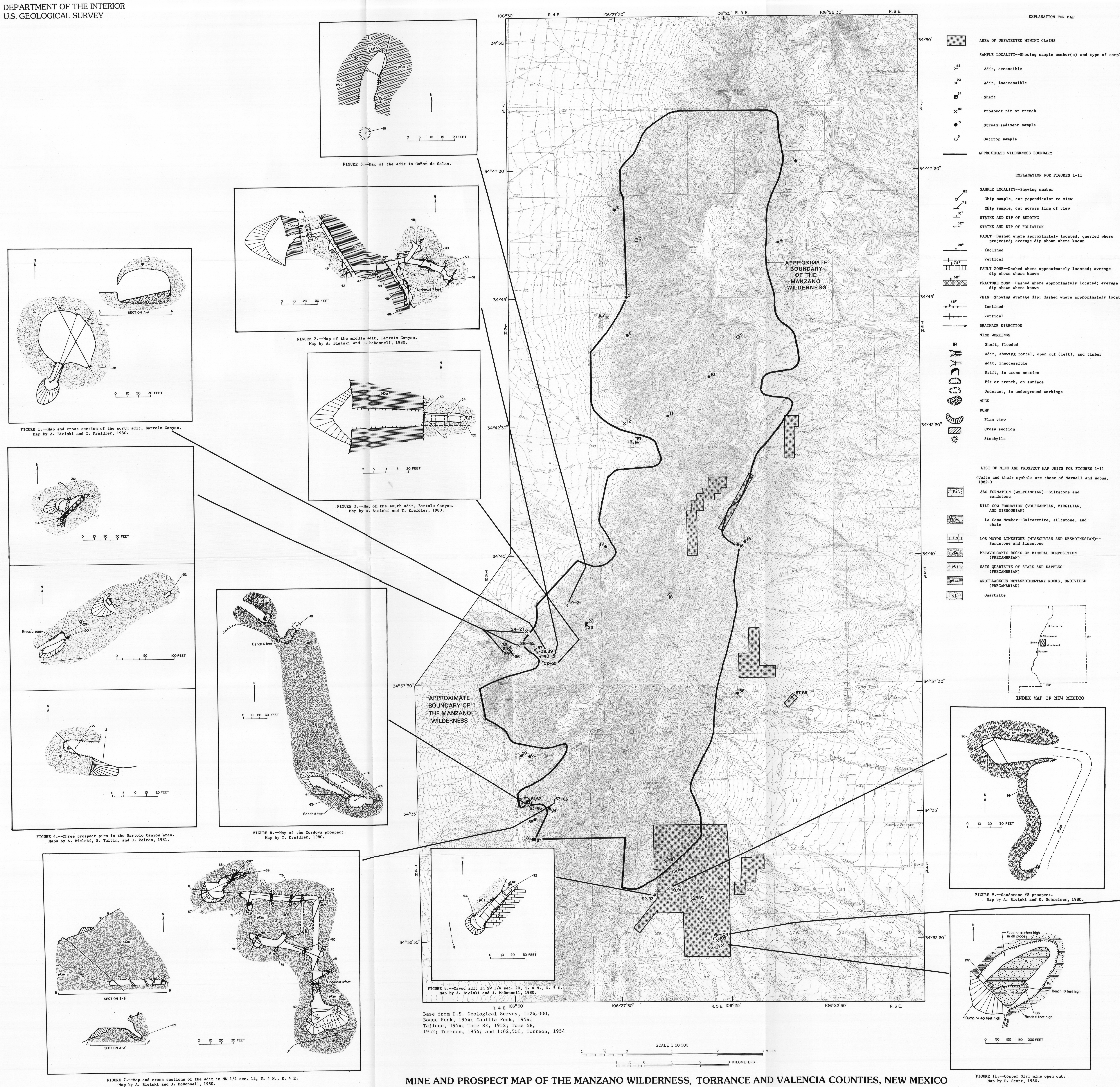
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MINE AND PROSPECT MAP OF THE MANZANO WILDERNESS, TORRANCE AND VALENCIA COUNTIES, NEW MEXICO

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1986