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191-B

Item 19

BOVARD MINE

Location and Access. The Bovard mine is in the Rand mining district near the north end of the Gabbs Valley Range, on the east slope of the Range, in Sec. 33, T. 11 N., R. 32 E. (see U. S. Geological Survey, Hawthorne 1-degree topographic quadrangle map), 1½ miles east-southeast of the Rand mine.

History and Production. Development work has been done intermittently since 1908, but no ore has been produced.

Previous Work. Schrader (____) has described briefly the geology of the mine.

The Rocks. At the mine, a series of Tertiary volcanic rocks overlie Jurassic-Triassic limestone. The volcanic series is about 2,000 feet thick, and consists, in descending order, mainly of andesite, rhyolite, and dacite, with the rhyolite being the most widespread and abundant.

Structures. The Jurassic-Triassic limestone has been faulted and folded into an anticline that plunges northeast. A faulted and brecciated zone, striking northwest, cuts the volcanic series and limestone. This zone extends for about 5 miles to the northwest, and is the same zone that contains the veins at the Rand mine. The zone "feathers out" in the limestone at the southeastern edge of the Bovard property.

Veins. There are two, parallel, throughgoing veins at the Bovard mine, as well as several shorter veins and splits. The veins are in the northwest-trending faulted and brecciated zone, and consist mainly of brecciated quartz and silicified rock fragments stained and encrusted by iron and manganese oxides, and a little pyrite, chalcopyrite, and free gold.

Molybdenum Minerals. Schrader (____) states that at the Bovard mine: "Locally [the veins] are sparingly streaked bluish with molybdenite stains, as on the Hidden Treasure ground", and that "in the Hidden Treasure No. 4 shaft and the 120-foot tunnel to the northwest, the quartz . . . . is stained darkish and is freely parallel marked with streaks and stringers up to 1/10 inch wide of bluish-black ilesmannite . . . . "

(1968)

from John Schilling's notes