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JERSEY VALLEY DISTRICT

LOCATION

The Jersey Valley mining district is a small district located on the southwest edge of the Fish Creek Mountains. The Jersey Valley-Rex group of mines is located in S27 and 34,T27N,R40E. The Black Eagle manganese mines are reported to be near the section line of S11 and 14,T27N,R40E.

HISTORY

The Jersey district was discovered by A. S. Trimbel in 1874. The Jersey Valley Mine produced considerable shiping ore from 1880 to 1910, and small shipments from 1921 to 1929 (Vanderburg, 1936). The ores were mined mainly for silver and lead, but zinc, copper, and gold were also recovered (Johnson, 1977, p. 62-63).

The Black Eagle manganese mines were located in 1934, and explored by the U. S. Bureau of Mines in 1941 (Needham and Trengrove, 1950; Tengrove, 1959). The mines produced small shipments of 21% manganese ore, mined by open pit methods, in 1952 and 1953. The U. S. Bureau of mines reports refer to the manganese mining area as the Blue Lead district.

GEOLOGIC SETTING

The rocks exposed in the Jersey Valley district along the southeast flank of the Fish Creek Mountains are Pennsylvanian and Permian units of the Pumpernickel and Havallah Formations. The Pumpernickel is predominantly greenstone and dark chert; the Havallah is chert and quartzite, with smaller amounts of limestone and slate and a little conglomerate (Ferguson, Muller and Roberts, 1951). A small diorite stock crops out just to the south of the Rex Mines (Johnson, 1977, p. 62; Ferguson, Muller and Roberts, 1951).

ORE DEPOSITS

The most extensive workings in the area of the Rex Mines are along a N10°W, 60°SW vein which cuts light gray chert and olive siltstone of the Pumpernickel Formation. The mineralized fault zone consists of spotty, fine-grained quartz and ocherous limonite gossan. No sulfide minerals were observed in outcrop or on dumps; however, Vanderburg (1936, p. 19) reports that the ore is argentiferous galena with lead carbonate. The district has also produced some zinc, copper, silver and gold. From the sparse information available, the ore was primarily agentiferous galena, associated with sphalerite and minor carbonates and oxides (Johnson, 1977, p. 63).

The manganese deposits are reported to be three narrow, lenticular bodies consisting of an intimate mixture of manganese oxides (chiefly psilomelane), wad, and silica (Needham and Trengrove, 1950; Trengrove, 1959). The lens-like bodies parallel bedding in the enclosing cherts, and red jasper occurs both above and below massive ore. In addition, stringers

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of manganese oxides occur in rocks below the ore. All these features suggest a syngenetic exhalative origin for the deposits. Outcrop samples reportedly contain 0.1-0.6 oz silver per ton, but no zinc or lead (map by L. B. Lafcke, 1937, in Nevada Bureau of Mines and Geology files). The major ore body is reported to be 820 feet long and an average of 35 feet thick (Johnson, 1977, p. 63).

SELECTED REFERENCES

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