The outcrop appears to be a siliceous phase in the quartz-diorite, represented by small quartz lenses and stringers with considerable rhodonite now mainly altered to manganese oxides. A sample across the face of the "ore" assayed 2.87 percent manganese; a sample of hand sorted ore on the largest dump assayed 17.31 percent manganese. It is probable that a small tonnage of selected manganese oxides could be made available; they would be highly siliceous.

Authority: FWL (?), Department report

Owners: George McAllister and Wax Campbell.

Location: Sec. 5 (?), T. 36 S., R. 7 W., near the summit of the slope north of Shan Creek at an elevation of 3000-3500 feet.

Area: Four claims; Manganese Mystery No. 1, 2, and 3, and Manganese Mystery Extension.

Geology: "The locality is made up principally of granitic rocks, probably tonalite, as characterized by A. N. Winchell. The country rock in the vicinity of the deposit is a porphyritic variety, resembling a diorite, in places much altered and having a schistose structure."

"The deposit has been explored mainly for gold on the Manganese Mystery No. 1 claim where it has been reported that high-grade gold ore has been found. There are several opencuts, and two shallow shafts have been sunk. The area thus explored represents about 200 feet by 150 feet in extent."

"The outcrop appears to be a siliceous phase in the diorite, represented by small quartz lenses and stringers with considerable rhodonite now mainly altered to manganese oxides. There are large blocks, up to two or three hundred pounds in weight, at or near the surface, which have the appearance of being nearly pure, hard manganese oxides, but on being broken, most of them show remnants of unaltered rhodonite with quartz. The largest opencut showed that in sinking 10 or 15 feet below the surface, the manganese oxides were perceptibly smaller in quantity. It seemed probable that exploration to the west of the present openings would show more of the oxidized rhodonite."

"The altered porphyry wall rock has been permeated and stained by manganese oxides over the area opened up; and, in places close to the original rhodonite croppings, the oxides have been deposited in irregular small veins and stringers making up a third to a half of the rock. These oxides decrease in proportion to the distance away from the quartz-

rhodonite outcrops until it becomes a very thin staining".

"A wall on the west side of the outcrop, probably indicating the trend of the deposit, strikes due north and dips steeply to the east."

"Further surface work would probably expose more of these oxidized rhodonite outcrops, but it is improbable that more than a small tonnage of selected manganese oxides could be made available, and that would be a highly siliceous product. A sample (#10 - 2.87%) of manganese stained porphyry over a thickness of 6 feet was taken in the face of the largest opencut. Hand sorted ore on the largest dump is represented by sample #11 (17.31%)."