

tailings are worth \$82.43 per ton of concentrated ore or gold \$76.62, silver \$5.81.

Mr. McKellar's report and that of Mr. McDermott contain a description of the property and estimates of its capabilities and from these the character value and prospects of the mine can be judged.

REPORT OF MR. WALTER McDERMOTT,

JACK FISH LAKE LOCATION.—SHIBBANDOWAN.

In the winter of 1872-3 in company with Captain Frue, I visited the Jack Fish location, which is situated about 85 miles west of Thunder Bay, Lake Superior.

The gold-bearing vein, on which some little work had then been done, is situated on one side of, and running parallel with, a narrow valley formed by walls of granite on the one hand and green stone on the other. The vein itself rests on the granite wall but with an interposing thin belt of talcose slate preventing actual contact. For several hundred feet on both sides of the principal working, the vein has been traced, but as the period of my visit was mid-winter, with its customary heavy covering of snow, my personal observations were confined to the points at which work was actually in progress. At different points of the principal opening, the vein varied in width from 2 to 7 feet, and consisted of quartz, with occasional patches of yellow magnesian spar. The minerals contained in the gangue were principally copper and iron pyrites, light colored zinc blende, galena, and with varying small proportions of free gold and sylvanite (telluride of gold and silver). The sulphurets appeared from a number of assays to carry always a small though variable quantity of both gold and silver, the two metals maintaining a pretty constant relative ratio; and occasional streaks of the mixed sulphurets, differing but very slightly in appearance from the bulk of the mineral, yielded quite richly on assays. The occurrence of the free gold and sylvanite, generally, though not always, in conjunction, was irregular but not