

300 feet. At the lower end a siphon of rivetted iron pipe conveys the water over a narrow draw, 175 feet in depth, and delivers it to a short ditch leading to a pressure box, from which a pipe line runs down the face of the bank to the mouth of the old tunnel delivering water under a head of about 400 feet. The fall in the creek being insufficient to carry off hydraulic tailings they will have to be sluiced away in boxes for about half a mile below the Falls. This will necessitate the bottom of the hydraulic pit being some 50 or 60 feet above the creek at the mouth of the old tunnel, consequently while the upper part of the bank can be run off by straight sluicing methods, the lower 60 feet will have to be raised by an elevator.

The bank representing the face of the old channel has been cleared of timber. It is about 400 feet high and is composed of fine gravel, silt and some clay, and will wash cheaply and quickly. It was expected that hydraulicing operations would commence this spring, and that, with judicious handling, the property has fair prospects of becoming a producing mine this season.

The East Kootenay Placer Mining Company has secured leases of about $4\frac{1}{2}$ miles of ground above the Falls, and has put in a steam shovel for lifting the gravel into the sluice boxes. At the point selected for operations the creek bed has a grade of two to three per cent. At a depth varying from three to ten feet there occurs a false bedrock, consisting of a sandy clay on and above which gold in considerable quantities has been found. The true bedrock is believed to be at a depth of, approximately, 50 feet, having been struck about that depth in two shafts.

The intention when the plant was put in was to work the gravel on and above the false bedrock, and of this a patch 64 yards long, eight yards wide and two yards deep, equal to about 1,000 cubic yards, was taken and dumped into the rough sluice boxes. From this gold to the value of \$260 was reported to have been obtained, equivalent to 26 cents per cubic yard. If the results from the ground worked may be taken as an average of the values to be obtained from above the false bedrock there is on the leases a large tonnage of material, which, with certain necessary modifications in the plant to suit local conditions, may be handled at a good profit.

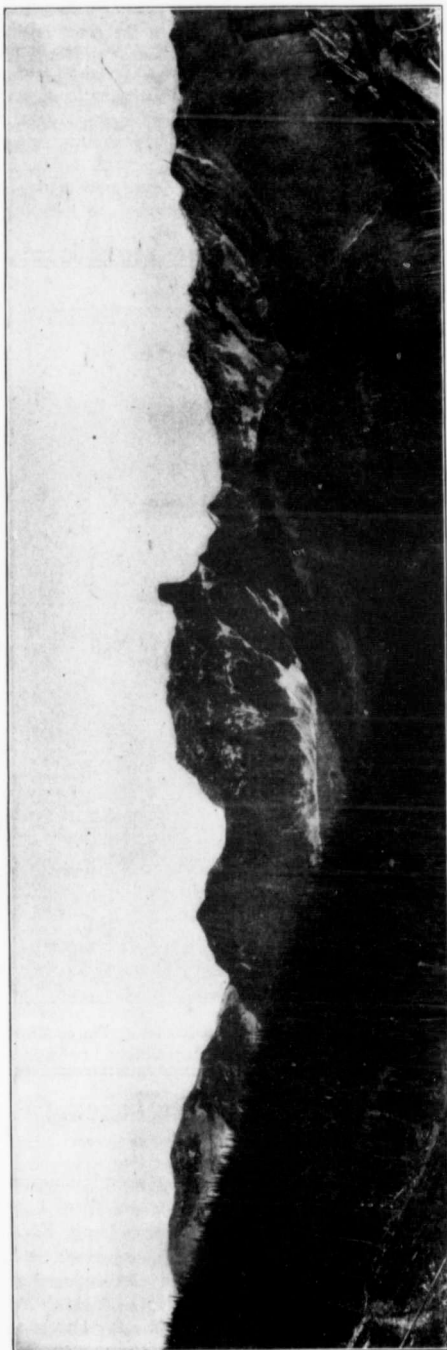
Water for sluices is taken out of the creek about half a mile higher up than where the shovel has been placed, and is brought down in a board sluice box 32 inches wide and 15 inches deep.

WETHERILL MAGNETIC SEPARATING PROCESS AND PTARMIGAN MINE ORE.

IN his summary of the general developments of the year in the Province the Provincial Mineralogist makes the following comments on magnetic concentration:

"Experimental tests have been made which lead to the belief that much of the zinc which now is regarded as merely a contamination of the lead ores of

the Slocan, may be separated by a magnetic process and rendered available as an ore of zinc.



View from Ptarmigan Mine, McDonald Creek—Windermere Mining Division, S. E. Kootenay.

"An experimental Wetherill Separator has been installed in the Province, with which many ores have