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OTTAWA, December 31, 1920/1921

REPORT
of the
ORE DRESSING AND METALLURGICAL LABORATORIES

Test No.140

See Ser 1317

A carload of copper ore, shipping weight 50,760 pounds, was received September 4, 1920, at the Ore Dressing and Metallurgical Laboratories from the Grandy Consolidated Mining, Smelting & Power Co., Anyox, B.C. The ore was a representative shipment of their low grade Hidden Creek No. 2, and consisted of chalcopyrite and pyrite in a greenstone gangue.

Concentration tests were desired to determine its adaptability to flotation by the various processes; to make a high grade concentrate with a high recovery of the copper values. To accomplish this necessitated a selective separation of the copper and iron sulphides.

During the latter part of the year a number of small scale tests and seven larger scale tests were made on the pneumatic and mechanical agitation type of flotation machines, using flotation reagents such as oil, luckenbach reagents, and X-Y reagents.

The results obtained to date have been good, showing that the ore can be successfully concentrated. Further work is being carried on and the results of comparative tests will be embodied in a report as soon as completed during the following year.