

netite extracted from the St. Lawrence sands show an iron content of 69.3 per cent. with a trace of titanium, leaving a sand tailings carrying 2.8 per cent. iron.

As illustrating the enrichment of hematites, two samples are shown, one being the separation of hematite and sandstone, producing an iron concentrate carrying 65 per cent. in iron and .008 in phosphorous, and a sandstone tails carrying 8 per cent. in iron, .04 in phosphorous showing a most interesting elimination of the phosphorous from the iron compound. The second being the separation of hematite and jasper, the hematite product carrying 50 per cent. iron, jasper 13 per cent. In connection with the hematite samples it will be interesting to note the size, the material having been crushed to pass a 4 mesh screen.

As illustrating the iron-zinc separation at Leadville, samples are shown, assaying for a zinc product 46 per cent. of zinc and 3.2 per cent. iron, and for the iron product, 37 per cent. iron, 7.3 per cent. zinc. The equivalent samples for the Broken Hill ores were tails carrying 8 per cent. in zinc and heads 48 per cent. zinc.

From the manganese industry samples are shown representing the concentration of Utah manganese from silica and gangue, the manganese being enriched from 15 per cent. to 41.8 per cent.

From the field of corundum cleaning two samples were shown, one being material at 20 mesh, showing cleaned corundum having .08 per cent. of iron and a magnetite which had been taken from the corundum carrying 65 per cent. in iron. Corundum of 100 mesh showed only a trace of iron after having been cleaned and produced heads running 63 per cent. iron.

Another sample of the concentration of magnetite was shown in the concentration of black sands from placer workings. In this case the concentration was 20 to 1, ilmenite and some of the rare metals being pulled away from the gold and other sands leaving a concentrated product which would stand shipment to a smelter.

A SUMMARY OF MINING PROGRESS IN BRITISH COLUMBIA DURING THE MONTH OF NOVEMBER.

CONDITIONS generally during November have been settled and favourable, production having been steadily maintained while a number of important transactions, chiefly in the nature of the bonding of claims on working terms are reported to have been carried through.

In the Coast districts activity has been chiefly confined to development work on Texada Island, in the Mount Sicker section, and at Howe Sound where the work of installing machinery at the Britannia continues. In the first named district very satisfactory results are attending the development of the Marble Bay mine, where a fine body of ore has been opened up in the lower levels. The Tyce Copper Company realized last month a record return on ore treated at the Ladysmith smelter, a recovery of \$83,547 having

been made, from which freight and refining charges are deducted, on consignments of rather under six thousand tons. Near Ladysmith a promising property, the Victoria, from which already small shipments have been made is being developed. The coal mining situation on Vancouver Island appears rather less satisfactory, the output from the collieries at the present time being relatively small. It is worthy of note, however, that the Comox high class bituminous coal is being subjected to test by the Japanese naval authorities with the prospect of its being used largely on that country's men-of-war.

The season of active work in the placer mining districts of Cassiar and Cariboo having been closed, there is, of course, little to note in reference to recent developments in those regions. The report of the season's operations of the Thibert Creek Hydraulic Company will, however, be issued shortly, and we are given to understand that the additional capital having been provided, the work of suitably equipping the mine and increasing the water supply to a thousand miners' inches was successfully carried out, and the mine may be expected therefore to yield proportionately greater returns for future working. Last year, it will be remembered, notwithstanding the inadequacy of the water system and the shortness of the season, the profits represented a return in the neighbourhood of 20 per cent. As a result of the pioneer work of this company, and its now promising prospects, a number of other undertakings of a similar nature are contemplated, all the available ground on the creeks in the neighbourhood having been applied for during the past season. In Cariboo the fact that the Slough Creek Company has been unable to secure additional and much needed capital in London, the attempt to place another issue of debenture stock having failed, is much regretted, as the existence of the enterprise is thereby threatened. The work at the mine has been carried on for many years in the face of great natural difficulties and at enormous expense, and it would certainly be most unfortunate if at this juncture when the company is within measurable distance of achieving success, that all should be lost. The persistence and well-directed energy, however, which has characterized effort in the past may yet carry the day, and doubtless those most heavily interested in the success of the venture will yet find some means of successfully meeting the present crisis in the company's affairs.

At Kamloops the successful operation of the Iron Mask is reviving and encouraging interest in the development of other claims in the district, and this month work was resumed on the Truth group, which is reported to be a property of considerable promise. During the year, too, much development has been performed on claims in the Jacko Lake section. Of these the Ajax and Monte Carlo have been opened up by much surface work, which has exposed deposits or leads of good width carrying gold and copper values of \$12 and over.

At Camp Hedley, the Nickel Plate mill was closed down in October for some days by the washing out of