

ore shipped to the smelters is \$7 to \$8 per ton, the statement is incorrect. The gross value of Rossland ore varies from \$10 to \$12 per ton, as the published reports of the companies show. The average gross value of 162,110 tons of Le Roi ore mined and shipped to Northport during the last financial year of the Le Roi was \$10.94 per ton. It is true that 19,014 tons of second-class ore, shipped from the dump, averaged only \$7.52 gross. Centre Star's shipments during that company's last financial year averaged \$9.47 per ton for the 79,053 tons sold, and Wai Eagle's output last year of 61,064 tons averaged \$9.58 smelter's gross assay value. During the earlier years of production at Rossland the average value of 128,428 tons shipped during four years, 1894-1897, was \$32.05 per ton, but a much lower grade of ore can now be sent to the smelter without loss.

"If the Trail smelter is included in the scheme, the enterprise will be assured of the cheap coke controlled by the Canadian Pacific Railway."

While the Canadian Pacific Railway has coal mines (but no coke) at Bankhead, near Banff, along its transcontinental line, these are too far away to be considered as a source of fuel supply to the southern Kootenay and Boundary districts of British Columbia. The C.P.R. does not control any coke, but buys its supply for the Trail smelter from Crow's Nest Pass collieries. It has been proposed that the new combination acquire coal lands, and that a large sum be expended in their development, with a view to eventually securing its fuel supplies from its own coal mines. The coal lands proposed to be acquired are, it is understood, as yet undeveloped.

"Finally, by way of supplement, there is the suggestion to make an arrangement with the Granby Consolidated Company, in the Boundary district, which can furnish a fluxing ore, chiefly magnetite and chalcopyrite in a lime matrix, also suitable for smelting with the Rossland sulphides. This ore is, metallurgically, extremely docile. Unfortunately, from a metallurgical standpoint the Snowshoe ore would be useless as a base for the Rossland pyrrhotite because it carries an excess of silica, being, in this respect, less docile than the ore of the Boundary district, in which it is situated."

So far as known, there has been no suggestion on the part of those actively engaged in promoting the proposed consolidation to make an arrangement with the Granby Company. The opinion that the Granby can furnish a fluxing ore while that of the Snowshoe would be useless from a metallurgical standpoint, shows lack of knowledge of the actual position. The two properties are on the same hill or mountain, the Granby on its western slope and the Snowshoe on its eastern, with probably less than a quarter of a mile distance between them. The ores of the two mines are similar in character, so that one would be just as useful, or as useless, as the case might be, as the other. Our information is to the effect that Boundary ores, that is those of the larger mines, when smelted straight make about 46 per cent silica slag,

and that Boundary smelters buy such ores as those of the Emma and Oro Denoro, which contain an excess of iron, paying practically limestone prices for them. There is, therefore, little justification for the use of the word "fluxing" in connection with using Boundary ores with Rossland ores. Mr. A. J. McMillan, general manager of the Le Roi Mining Company, told the shareholders (Le Roi Report, p. 22, that: "During the last two years certain conditions have arisen in the Boundary enabling the smelters in that part of British Columbia to pay higher prices for a limited tonnage of Rossland ores than either of the smelters in the immediate neighbourhood of Rossland could afford to pay. . . . About 23,000 tons were hauled by the Canadian Pacific Railway right through the yards of its own smelter at Trail to the Greenwood smelter, 100 miles distant. Some 16,000 tons were hauled by the Great Northern Railway through Northport to the Granby smelter at Grand Forks. A metallurgist experienced in the reduction of both Boundary and Rossland ores, says: "As to the mixture of Snowshoe and Le Roi ores—it is true both have excess silica. Le Roi also has excess sulphur and alumina. Both ores must have either iron or lime. Lime is not only the cheaper but the only flux available in any certain and considerable quantities to either the Northport or the British Columbia smelters. A mixture of Snowshoe and Le Roi ores would cut down sulphur and alumina in the Le Roi, making it possible to use lime in the cheaper flux, a faster running furnace. Farther than this there are no fluxing qualities in either Snowshoe or Le Roi ore. That the advantage would be considerable I am sure no metallurgist would question."

"To bring the Granby ore to the smelters now in receipt of the Rossland output would mean a journey of 130 miles over a mountain divide."

This statement is only partly true. The railway distance by C.P.R. to the Trail smelter from Phoenix, where the Granby and Snowshoe mines are situated, is 112 miles and the haul is over a mountain divide. From Phoenix to Northport by the Great Northern Railway is 95 miles, with a down-grade all the way except, it may be, a slight up-grade following the Columbia river from Marcus up to Northport, but there certainly is no divide to go over.

"The Great Northern Railroad controls the business of the Boundary district, and also unites Rossland to Northport; the elimination of the Trail smelter would mean the diversion of traffic to Mr. Hill's system, while the inclusion of the smelter now managed by Mr. Aldridge might lead to the closing down of the Northport works."

Far from the Great Northern controlling the business of the Boundary district, it has only lately commenced to compete for the Boundary ore traffic, while the Canadian Pacific has been hauling ores from Boundary mines for five years. The Great Northern completed its branch to Phoenix about the first of the current year, and a few weeks later commenced to haul part of the Granby ore to that company's