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PRELIMINARY REVIEW AND ESTIMATE

—OF—

MINERAL PRODUCTION FOR YEAR 1911.

—BY—

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The *Lorne* ran some 84 tons through its stamp-mill, recovering gold to the extent of $17 per ton of ore milled.

THE COAST DISTRICT.

Britannia Group.—The most momentous advance yet made in the Coast District in relation to the development of its metalliferous resources was that at the *Britannia* mines, the result of work done under the management of Mr. R. H. Leach during the years 1910-1911. It is stated that there is now in sight in these mines a large tonnage of ore that may be expected to average 3 to 4 per cent. copper. A rough estimate places the quantity at fully 1,000,000 tons, and it is believed the development of the early future will considerably increase the available reserves of commercial ore. More than 100,000 tons was extracted in 1911; most of this was passed through the graded crushing and concentrating mill. Extraction was reported to be good for chalcopyrite ore—about 80 per cent. A full-sized working unit of the Elmore Vacuum Process plant gave excellent recoveries, indicating that treatment of fines and slimes, following hand-sorting and jigging, will bring the total extraction of value up to a higher percentage. More than 100,000 tons of ore was milled, and the concentrate produced contained between 8,000,000 and 9,000,000 lb. of copper and comparatively small value in silver. The shipments averaged about 14 per cent. copper.

Texada Island.—The operations of the Tacoma Steel Company at its *Marble Bay* mine constituted the chief mining progress on Texada island in 1911. Shipments from this mine totalled 22,500 tons of ore, averaging about 5 per cent. copper, and fair gold and silver value beside. The ore is chiefly bornite, which has been mined on various levels down to 1,260 feet deep, and it is stated that it has been found lately on the newly opened 1,360-foot level.

The *Cornell*, of the *Van Anda* group, worked by the Tyee Copper Company under lease, shipped 1,832 tons of ore to Ladysmith. Little other metal-mining was done on the island. Negotiations for the purchase of the Puget Sound Iron Company's iron property did not result in a change of ownership, nor was any work done on it. The Tacoma Steel Company continued making and shipping lime from its kilns at the north end of the island.

Another company—of which Mr. B. A. Lasell, of Vancouver, is the manager—has been operating a limestone-quarry at Blubber bay, and has shipped a large quantity of lime and also a considerable quantity of magnesia-limestone to the paper-mill at Powell river.

Oil for Fuel in Smelting.—Demonstrations of the suitability of oil for fuel in smelting copper-ore were made by Mr. Thomas Kiddie at the old smeltery at Van Anda. From a short report of the last run made by Mr. Kiddie the following excerpt has been made: "We used 157 gallons of oil in 2.33 hours, and 60 gallons for heating-up, or 217 gallons in all. This gives an average of 14.6 gallons of oil per ton of material smelted, equal to 43.8 cents per ton of ore. The rate of smelting was 110 tons per twenty-four hours. . . . After certain changes shall have been carried out, the cost of oil consumed per ton of material smelted should approximate 30 to 35 cents per ton of ore."

General.—Practically no metalliferous mining was done on Vancouver Island in 1911. Among other prospecting was that by the Mercury Mines Company, of Victoria, which is investigating the occurrence of small quantities of cinnabar on the west coast of the island.