

also from South America. The smelter at Ladysmith, with a capacity of one hundred tons per day, has been erected by the Tyee Mining Company for the purpose of treating the ore from that mine.

The productive mines in the Alberni District have been the Three Jays, the Monitor, the Three W.'s, and to a limited extent, the Alberni Consolidated. The two last named produce gold-bearing quartz, some of which carried very high values, the others copper-gold ores, the grade ranging from five to ten per cent. copper (dry) and about \$3.00 in gold and silver per ton. In addition to these properties there are in the Alberni District a very large number of promising prospects partially developed which really merit thorough exploitation and systematic work. Besides the copper-gold and gold-bearing quartz ores in the Alberni District, there are quite extensive deposits of magnetic iron ore. During the past two years serious attempts have been made to determine the extent and permanency of these deposits, control of which has been acquired by a syndicate from the United States with the avowed purpose of establishing iron and steel plants on that side of the line. The ore carries from about 55 to 65 per cent. metallic iron, very low contents in phosphorous and silica, and no titanium.

In the vicinity of Kennedy Lake comparatively narrow fissures filled with high grade gold-bearing quartz were discovered in 1899 and worked to some extent. On the Rose Marie claim a concentrating plant was erected and the concentrates shipped to the Tacoma smelter, but the owners becoming involved in financial difficulties the plant was closed down. However, during the past season several other mineral locations were made in the same vicinity and samples of the ore shipped to the Crofton smelter for treatment with satisfactory results to the mine owners.

In the vicinity of Clayoquot Sound and Sidney Inlet a large number of mineral locations have been staked and the assessment work kept up on them. The ore is usually a fairly high grade chalcopryite associated with magnetite, but on some locations in the Sidney Inlet camp considerable quantities of bornite carrying high copper values occur at and near the surface but is usually replaced by chalcopryite before any great depth has been attained in the workings.

The Quatsino Sound District has during the past year attracted much attention, due largely to the fact that a Tacoma company acquired by purchase a considerable tract of mineral land on which very extensive surface showings of good grade copper ore occurred, and immediately commenced systematic development on a large scale. An aerial tramway and bunkers were erected to facilitate shipment of the ore quarried from the outcroppings. The grade of the ore had been established previous to the commencement of the construction of these improvements through shipments made to both Tacoma and Crofton smelters. The permanency and extent of the ore bodies at depth are being determined by actual work.

The section in which these ore bodies occur embraces quite a large territory near the northwest end of the Island and during the past season has received more attention from prospectors than any other portion.

The coal mining industry of Vancouver Island is so firmly established and the areas of coal-bearing land so well known that any description in this article is unnecessary, nearly all being embraced by the land grant of the Esquimalt and Nanaimo Railroad except about thirty thousand acres which was purchased by the New Vancouver Coal Company from the Hudson's Bay Company previous to confederation and a limited area on Quatsino Sound owned by a San Francisco syndicate.

Owing to the discovery and use of fuel oil in California, which has in the past been the most important market for Vancouver Island Coal, the collieries have not produced as large a quantity during the present year as previously. Roughly speaking, the output has, in the past, averaged nearly one million and a half tons a year, about two-thirds of which has been exported. The establishment of smelters on the Island will prove beneficial to the coal mining industry, because of the increased demand for coke as well as coal.

REDUCED COST OF MINING.

THE following is the full text of the interview with T. G. Blackstock, vice-president of the War Eagle and Centre Star mining companies, a telegraphic summary of which appeared in the *Nelson Daily News* Toronto despatches recently.

The interview was given to a *Globe* representative. Mr. Blackstock said:

"For a long time past, I might almost say for some years, it has been apparent to us that the charges of mining and development in Rossland, on the one hand, and of freight and treatment on the other, were such as to preclude the possibility of these mines paying the dividends that were expected. The reason for this was that the high-grade ore bodies were segregated, and a great deal of dead work had to be done to reach them, often through ore of too low a grade to stand these charges. It appeared to us, therefore, imperatively necessary to obtain, first, a substantial reduction in the cost of mining and freight treatment, and, secondly, to discover some means of handling these low grade ores at some profit.

"Since dividends were last paid we have succeeded in reducing the cost of mining development very materially, in fact from about \$4 a ton to \$2.10 a ton, or cutting them about in half. This has been done chiefly by introducing a modified form of contract system. It was only lately, however, that the smelter people saw their way to make such a reduction in the freight and treatment charges as would justify us in commencing shipping on a large scale. Meanwhile, during the last three years, development work has been steadily pushed, and even while not shipping we have had at least 225 men employed constantly in the two mines.

"The whole cost of freight and treatment," Mr. Blackstock continued, "has been reduced from \$6 to \$5 a ton on ores containing values to the amount of \$9.50, while in ores under this grade the charges have been reduced from \$6 to \$4.

"During this time, also, attention was paid to the problem of treating the low grade ores by some