

is driven 45 feet to the right. No magnetite is exposed by this work, which confirms the blanket-structure theory, but farther up the mountain there is a contact between crystalline limestone and igneous rock, similar to that underlying the magnetite on the face of the bluff, and at the contact an outcropping of magnetite occurs, but apparently not of sufficient extent to be of importance.

A sample from the bluff assayed:—

	Per Cent.
Iron	60.7
Sulphur	Trace.
Phosphorus	Trace.
Silica	13.6

HEAD BAY, NOOTKA SOUND DISTRICT.

These mineral claims are situated about one mile from the head of Head bay, at the upper end of Thupana arm, Nootka Sound. **Glengarry and Stormont.** The original locators sold a two-thirds interest in the property a few years ago to the Wellington Colliery Company, through the late William Sutton, which interest passed to the successors of that company, the Canadian Collieries (Dunsmuir), Limited, the remaining one-third being owned by Clarence Dawley, of Clayoquot.

The claims are staked from south to north, with the No. 1 stakes adjoining, and within the boundaries there is a ridge that reaches an elevation of about 800 feet and extends across both claims from south-eastward. Magnetite-deposits occur along the ridge, of the contact-metamorphic type, lying between crystalline limestone and diorite. Garnetite is the only gangue material associated with the magnetite in any appreciable quantity.

Open-cuts and stripping along the north slope of the ridge have exposed solid masses of magnetite which can be traced in a nearly continuous line for several hundred feet, and varying in width from about 7 to 55 feet. Some of the open-cuts are about 20 feet high at the face, and stripping, in some places, exposes magnetite outcroppings extending downwards from the summit to near the base of the ridge for a continuous length on the incline of about 200 feet, and a maximum width of 40 to 55 feet.

A general sample representing about an average of the deposits assayed:—

	Per Cent.
Iron	55.8
Sulphur	0.1
Phosphorus	Trace.
Silica	1.6

Lindeman reports a sample from this property that assayed:—

" Iron	66.17
Sulphur	0.017
Phosphorus	0.016
Silica	6.10 "

Apparently the quantity of magnetite on these claims is exceptionally large. Considering the exposures seen by the writer, and estimating from approximate measurements, he figures that he is safe in placing the tonnage of *actual* ore available for quarrying at 250,000 tons, with an additional 250,000 tons of *probable* ore and 750,000 tons of *possible* ore that may be exposed by further development-work. The deposits are very favourably situated to ensure mining and transportation at a minimum cost.

Apparently the magnetite can be quarried from the north slope of the ridge to a very considerable depth, for a length of several hundred feet and an average width of about 40 or 50 feet, as seen by the writer. This would ensure cheap mining for