

exposure is across the ore-body which strikes north-west or nearly parallel with the lake-shore, and dips 63 degrees to the north-east. The outcroppings of magnetite can be traced about 30 feet down the creek-bank nearly to water-level, but no continuation of outcroppings are seen across the creek on the north side.

Only a very rough estimate of tonnage of available ore can be made. The writer estimates the *actual* ore at 20,000 tons and the *possible* ore at 280,000 tons.

The mountain rises very abruptly on the south side of the creek, and outcroppings of magnetite occur about 250 feet higher elevation than the open-cuts, but no work has been done. An average sample assayed: Iron, 50 per cent.; sulphur, 0.24 per cent.; phosphorus, nil; silica, 22 per cent.

Timber adapted for all purposes is very plentiful on the claim. The water in the small creek is sufficient for all purposes, including limited power, provided a storage-reservoir is constructed to conserve the supply.

Transportation facilities can be easily installed to the lake, where ore can be loaded on to scows and transported to deep water on Uchucklesit harbour, provided some more dredging is done in the stream that connects the two bodies of water.

UCHUCKLESIT HARBOUR DEPOSITS.

Cascade creek flows into Uchucklesit harbour about one mile and a half from the entrance, and is capable of being developed into one of the greatest water-powers on Vancouver Island; it falls about 2,100 feet in about one mile and a quarter through precipitous canyons.

Water for power purposes is already taken from Cascade creek by the Wallace Fisheries Company, and is used to run the machinery in the cold storage and cannery on Uchucklesit harbour at the foot of Cascade mountain, but in addition to this there is an ample supply for domestic and milling purposes near the head of the creek.

On the *Black Prince No. 2* claim, at the head of this creek, deposits of magnetite and pyrrhotite occur that form bluffs below the summit, and are distributed over the surface on the summit of Cascade mountain, a superficial area between 2 and 3 acres in extent.

These deposits are apparently not of the contact-metamorphic type, although, lower down the mountain, immense masses of crystalline limestone occur in contact with the same greenish-coloured igneous rock as enclose the magnetite-deposits on the summit. The exposures are all lenses, apparently disconnected. The line of strike is north-westerly, the dip about 75 degrees to the east. The development-work consists of large open-cuts; the most important of these is across the face of a bluff of pyrrhotite 25 feet long by 20 feet deep at the face and about 15 feet wide.

The occurrence of the bluff of mineral in such close proximity to magnetite-deposits is noticeable, and a sample was taken merely to determine the contents, and not because it was considered to represent iron ore. The sample is an average from the open-cut, and assayed:—

	Per Cent.
Iron	8.8
Sulphur	5.0
Phosphorus	0.3
Silica	75.5

Another open-cut 24 feet wide by 40 feet long by 7 feet deep is made on a disconnected lens of magnetite about 40 feet higher up the mountain, close to the summit. An average sample from this open-cut assayed:—

	Per Cent.
Iron	70.2
Sulphur	Trace.
Phosphorus	Trace.
Silica	1.4