

from 100 to 400 feet. It is highly crystalline, and is filled in places with secondary minerals, principally brown and yellow garnets, and green actinolite, with some pyroxene and pink scapolite. The granite bordering the limestone is also well mineralized, over an exceptionally large area, mostly with brown garnets and green epidote, often associated with magnetite, quartz, and calcite.

Ore Body and Ores.

The principal showing on the Little Chief is situated 400 feet southeast of No. 1 post. At this point a nearly solid magnetite mass, over 100 feet long, and fully 50 feet in width, outcrops at the surface. The magnetite has developed in limestone along the granite contact. A dike from the latter is traceable part way across it, and is also partially altered to magnetite.

The magnetite is loose and broken at the surface, and is stained everywhere with copper carbonates, mostly derived from chalcopyrite. Serpentine, calcite, and garnet, are also associated with it.

A number of smaller lenses of magnetite, some of them over 20 feet across, occur on the same claim, both in the limestone and the altered granite.

The Little Chief claim is not being worked at present. The development work is represented by a few shallow open-cuts. The grade of the ore is not known.

BIG CHIEF.

This claim adjoins the Little Chief claim on the north. It was staked September 15, 1898, by Wm. McTaggart, and is now owned by Josia Collins.

Geology.

Heavily bedded crystalline limestones, dipping steeply to the east, outcrop over a large part of the area of the Big Chief claim. A granite spur from the south cuts the limestones west of the centre line. Hornblende granites of the usual character outcrop along the eastern portion of the claim. Towards the north the limestones are intruded and replaced by an irregularly shaped area of hornblende porphyry older than the granite.

Ores.

The ore bodies on the Big Chief consist of a number of copper bearing magnetite lenses, all situated in the limestones close to the