

MINES OF BOUNDARY DISTRICT—No. VI.

THE B. C. MINE, SUMMIT CAMP.

(By S. F. Parrish, M. E.)

THIS property, the B. C. mine, owned by the "B. C." Chartered Company, Limited, of Montreal, Quebec, is situated in Summit Camp, in the Boundary district, on the divide between the North Fork of Kettle river and Boundary creek, about midway between the towns of Grand Forks and Greenwood.

The location was made in 1896 and development work was commenced in the summer of 1897. A shaft was sunk to a depth of 160 feet, mostly in ore and vein matter. From this two levels were turned, one at 50 feet and the second at 150 feet, and drifting was started in a general northerly and southerly direction, following the strike of the ore body, far as it could be determined.

gravity of about 3.00. There are different stages of alteration, of course, between the above-mentioned limits, one piece of rock not infrequently showing various degrees of metamorphism.

The microscopical determinations of a number of specimens of this highly altered limestone have revealed the presence of the following minerals, most of which are seen in each specimen: quartz, plagioclase, epidote, garnet, zoisite, magnesium and calcium carbonates, actinolite, kaoline, pyrite, chlorite and serpentine.

Into this mass of rock sheets of porphyry, varying in thickness, from four or five feet to thirty odd feet, have intruded, the intrusions having apparently followed more or less closely the bedding of the limestone. A microscopical examination of these sheets of eruptive rock reveals the following minerals: plagioclase, orthoclase, microcline, biotite and a little quartz, and the decompo-



MINE BUILDINGS B. C. MINE, MAY, 1901.

A branch of the Columbia & Western railway was completed to the mine in the autumn of 1899, this being a spur from the line from Eholt to Phoenix, and early in January, 1900, ore shipments were started from the dumps of ore that had accumulated during the development work. In June of the same year stoping was commenced.

The mine is equipped with a sufficient plant to break and hoist more than 200 tons of ore a day through the present shaft.

The country is limestone which has undergone various degrees of alteration from a white crystallised or marbleised rock, containing about 48 per cent. lime, and 7.30 per cent. silica and having a specific gravity of 2.67, to thoroughly metamorphosed limestone, having ordinarily a small gold value, about 3-100 of an ounce, and containing 70 per cent. to 80 per cent. silica and from 6.25 to 8.75 per cent. lime, with a specific

sition of these minerals, viz.: chlorite, carbonates and kaolinite. An analysis of two different varieties gives, respectively, silica 82.79 per cent. and lime 2.37 per cent., and silica 53.21 per cent. and lime 5.52 per cent.; specific gravity about 2.67. It will be noted that the porphyry is not mineralised at all.

Cutting through the above described rock formations are several faultings having a general northerly and southerly strike, with a slight dip to the east. There does not appear to have been any great vertical displacement, but there are indications of a more or less extensive lateral movement. It is in or near this faulting that the ore is found, extending into the country rock in a lense-shaped mass so far as developed, having an extreme width of about sixty-five feet by about 200 feet in length. This extends from the surface of the ground to a depth of nearly 300 feet, below which it has not as yet been followed.