

Other properties in this camp, which is situated at the head of Legate creek, about ten miles above the town of Pacific, worked on during the year were: The *M. & M.* group, owned by Bell and partners, and the *Regina* group, owned by Jones, Brown, and partners.

Fiddler Creek.—The *Fiddler* group, situated about four miles from Dorrien Station, was fully reported on by the writer in the 1916 Annual Report of the Minister of Mines. In the fall and winter of 1916 a wagon-road was built to the property, a temporary camp erected, and a crosscut tunnel commenced, which is expected to cut the vein and from which the mine would be developed; this tunnel was driven in 100 feet in slide-rock, clay, and gumbo, and for a few feet into solid rock, when operations were discontinued. The property is under bond from the owner to the *Fiddler Creek Gold Mining Company*, an Edmonton syndicate. It was expected that work would be resumed this summer, but this failed to materialize, and now nothing will be done until the summer of 1918. The property has undoubted merit, and it is probable that the cessation of development was due to financial reorganization of the company.

HAZELTON SUB-DISTRICT.

Rocher Déboulé Mine.—This mine, situated on Rocher Déboulé mountain and distant about ten miles from Hazelton, is the most important productive mine in the district; it has been described at length in the Annual Reports of 1914, 1915, and 1916.

This year the low level, or 1,200-foot level, crosscut tunnel was completed to the point where it should have encountered the main vein, and was continued for some distance beyond, a total of over 3,000 feet. A fracture-zone was encountered which may or may not be the downward continuation of the main vein, but drifting on it to the east and west failed to reveal any ore. The management is apparently hopeful of still finding the main vein, and so a raise is to be put up from the 1,200-foot level to the 500-foot workings. This raise will be on the incline and will be a little over 900 feet in length. It will follow somewhat approximately the position wherein surveys indicate that the main vein should lie, and frequent crosscuts from it will be made. It is confidently expected that this work will reveal the whereabouts of the missing vein and the ore-shoots contained therein.

The 1,200-foot level has, however, proved very successful in developing other veins on the property. One of these, the No. 2 vein, gives promise of being quite as commercially important as the main vein. All the ore shipped from the mine in the last six months of the year came from this vein. In addition to the good shoots of shipping-ore exposed in this vein, a tonnage of concentrating-ore has been opened up which is nearly sufficient to warrant the installation of a small mill. The grade of shipping-ore from this No. 2 vein is the best that has been sent out from the mine, much of it averaging \$5 in gold and 10 oz. silver to the ton, with 10 per cent. copper.

The No. 3 vein as exposed in the main tunnel also shows promise of becoming productive, but development of it has not yet been carried very far. Generally, conditions at this mine are quite satisfactory and a considerable productive period seems reasonably assured.

The tonnage of ore shipped during 1917 was considerably less than in the previous year. Most of the 1917 production was made in the last six months of the year, when steady shipments were made, mining in the first six months being mainly confined to development.

Delta Copper Co.—This company, which owns or controls the *Delta*, *Highland Boy*, and other groups of claims lying to the east of the *Rocher Déboulé* mine, has not been able to do very much this year. Some favourable showings on the upper vein on the *Delta* group were exposed by means of surface cuts, but no other development of importance was carried out.

The property of the company is situated in a somewhat inaccessible place, with the result that transportation arrangements are difficult. A wagon-road was completed this year from the *Rocher Déboulé* main camp in Juniper creek to the terminal of the *Highland Boy* 2-hucket tram, and over this road ore will be hauled this winter.

In the *Highland Boy* workings from 1,000 to 1,500 tons of shipping-ore is blocked out, and further development may be expected to show much more ore. There are two main veins, known as the "Upper" and "Lower" veins, which are exposed on the surface for some distance and partially developed; both of these veins have indications of being of considerable value.

In general, it may be said that the property of the *Delta Copper Company* gives promise of becoming a productive mine if sufficient capital is forthcoming to carry out the necessary development.