

This property is charted as Heaps and Simpson's two sections, 1027-93M (79 acres), and 1028-93M (80 acres), on the 9-mile creek, which falls into the Whyte River, just east of the latter section. The company has made a narrow cart-road, about $\frac{3}{4}$ mile long, for connecting the mine with the Corinna main road, at a point about $9\frac{1}{2}$ miles from the township. This road terminates at the top of a steep incline tramway, 9 chains in length, which descends the rather precipitous side of the gorge, 350 feet below. The mine-works are in the creek, 80 or 100 feet below the camp. Both sides of the creek are lofty and steep; and this mine, placed at the bottom of the dark narrow gorge, cut almost canyon-like in the table land above, occupies as strange and romantic a position as any in the Colony.

The country-rock may be classed in two groups. The upper and eastern part of the hill consists of quartz schist, inclined to be micaceous. It is light in colour. The schist in the creek, to the south and west, is dark grey and green, and carries copper pyrites. Its foliation planes are glossy with graphite, which, on being rubbed, leaves plumbago marks on the fingers. A little loose porous fibrous graphite (graphitoid?), of remarkable lightness, has been found in a seam in No. 1 level, near the entrance; and a kind of plumbago mud, resembling soot, occurs in the overburden, just above the schist, in the short trial crosscut from creek (above the adit.) Some of the schist is massively bedded, especially towards the junction of the creek with the Whyte River. Here dark, and sometimes glistening, crystals of hornblende may be seen in the rock with the naked eye. The rock is one of the crystalline schists, largely actinolitic, is non-felspathic, and requires extended microscopical examination before its exact nature can be safely determined. For the present, it can only be vaguely termed "hornblende schist". Wherever the foliation is most complete, the formation of lenticles and leaders of quartz is most marked. Then, where

the quartz leaders and the schists carry iron pyrites, copper pyrites are also apt to occur, though, so far, the later ore has not been found in any quantity outside the old prospecting shaft sunk in the graphitic schist in the bed of the creek. All through the mine a soft band of this schist is being followed, as a guide in tracking the ore formation. This formation and the enclosing schists run parallel with one another; and, although the soft band is rather constant, I look upon it as indicating a plane of weakness, allowing easy percolation of water, rather than anything of the nature of a fissure, the existence of which is altogether conjectural. The whole mass of schist has a strike N.20°W., and a normal dip to the N.E., though the latter varies in direction here and there. I believe the whole group of schists will be eventually found to belong to the Cambrian and pre-Cambrian rocks; but the evidence is not sufficient, at present, to enable a definite conclusion to be arrived at.

The first work done on the property seems to have been a small shaft, sunk in an extraordinary position, viz., in the bed of a creek not more than 12 feet wide. The early prospectors sank this to a depth of 22 feet in graphitic schist carrying quartz, barytes, and good copper pyrites. The late Mr. J. Harcourt Smith quotes samples of the pyrites as assaying 28% copper, 8 dwts. gold, and 10 oz. silver per ton. Mr. F.J. Rich, the present manager, continued the sinking down to 31 feet, leaving the formation in bottom, consisting of a couple of somewhat solid bands of copper pyrites, 3 or 4 feet wide, and 2 feet of mineralised rock. Influx of water stopped further sinking. I saw a few hundredweights of the copper ore from the shaft. It was being sorted and bagged, and I estimated its contents at from 20 to 25% copper. As all the ore has come from this awkwardly-placed shaft, the only course open for the company is to get underneath it as quickly as possible, and the management is doing this in the best way. A new shaft is being sunk on the eastern side of the creek, a few fathoms from the old one.

The schist is running parallel with the creek, so that drives will be opened out up the creek, first at a depth of about 60 feet, the same level as No. 1 tunnel, and again at a further depth of 80 feet, where the main adit will communicate with it when driven far enough. The strata dip easterly, therefore the new shaft is on the east side of the creek. This is the most important and necessary work at present proceeding on the mine. It will prove the value of this course of ore in particular, and, I may add, the value of the mine as a whole; for, if the contemplated drives do not disclose anything worth working, the outlook will be far from bright, as I do not see any other point which offers any strong inducement for further prospecting. The one thing about the work in the creek at this shaft which is encouraging and invites perseverance is that fair-quality metal has unquestionably been won here, and the solid quartz, with abundant iron pyrites and a little barytes, are favourable indications. The Whyte River flows over a hornblendic schist bottom, in a narrow gorge, 18 feet vertical below the main adit. The adit is driven 212 feet, first in the massive hornblende schist, then cutting the graphitic schist alluded to above. The schist here has a westerly dip, and is seamed with vertical and horizontal strings and veins of quartz, but the drive has yielded nothing so far except a few little veins of iron pyrites.

About 65 feet above the adit, a short trial crosscut has been put in from the creek. Up to now it has been passing through the heavy overburden of schists detritus which rests upon the bed-rock, but in the face the solid schist is just now beginning to show in the sole.

No. 1 level is 90 feet above the adit, and has been driven 320 feet, first in grey, and then in graphitic schist. In the end is a soft seam of this schist, which has been followed all along. The schist right across the face is veined with horizontal and vertical leaders of quartz, 1 inch and 2 inches wide. Samples of iron pyrites have been obtained from this level, but no copper ore.

No. 2 tunnel, 60 feet above No. 1, has been driven 60 feet in, and levels put in right and left in graphitic schist, but with no result. No. 3 is the top tunnel, 60 feet higher than No. 2, but is only 16 feet in, having been just started.

In the hill detritus are immense blocks of white reef-quartz, which have, apparently, rolled down from higher ground, and a good deal of loose big quartz is seen in the soil between the mine and the Corinna road. It is possible that a reef crosses the track, and it might be worth while to look for it, though the quartz which I saw is pure white, dense barren-looking rock, devoid of pyrites, and has an unfavourable appearance for gold.

Since my visit I have received news that a shoot of ore has been reached at the tunnel level, 55 feet from surface, about 25 feet long. This is satisfactory, so far as it goes, and further developments will be looked for. It is quite possible that, as a small mine, some success may be attained. Whether there is scope enough in this property for the important company who are now carrying on operations there is another question. The belt of country is cupriferous to some extent, and though no payable mines have been opened in it so far, there are possibilities which it would be foolish to deny.