

biotite granite containing a good deal of plagioclase. The quartz and feldspar show marked indications of great pressure. Much biotite, partially altered to chlorite is present and is associated with epidote, perhaps also an alteration product, having, however, in one case a core of allanite.

This specimen was considerably decomposed, being from near a vein and also near the surface. Two other specimens, one of them from a granite horse in a quartz vein, and the other from a cross-cut tunnel several miles distant, showed much the same characteristics, especially in the evidence of great crushing. The hand specimens do not show this crushing to any great extent, though the feldspar crystals are not very regular in outline at times. In this granite, which by the way, differs a good deal from the intrusive granites which break through the Slocan Slate series, near Three Forks, to the north, there are several distinct classes of mineral-bearing veins. These classes of veins differ both in origin and in the nature of the material filling them, but all occur in this typical porphyritic granite.

Class I. The most common and the most characteristic consists of irregular veins of coarsely crystallized opaque quartz. They vary quite rapidly in width, both laterally and in depth; their usual width is under four feet; their dip is very low, being from 10° to 50° from the horizon. No one of these veins has yet been explored to a greater depth than 100 feet. Hence all observations are confined to little more than surface showings.

Where shafts have been sunk a good deal of displacement is revealed along slickensided planes, more or less parallel to the strike of the vein, *i.e.*, usually parallel to the hill-slope wherever it may be.

The displacements are seldom more than a few feet, and the plane of faulting carries a good deal of gouge or selvage matter. Where the vein ends abruptly it is