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North Van. B.C.

OMINECA MINING DIVISION

The Fire Group

Fire Group
By A. Sutherland Brown

(55° 126° N.E.) (93M-16E/2) This property
which consists of 43 located claims

is on a knoll overlooking Lion Creek, 4 miles south of Kaza Lake which is 50 miles north-northwest of Smithers. It is held by R. M. Tait. Work done in 1966 included trenching and blasting small pits. Staked on June 14/67. → 1967

The area has not been mapped geologically but is close to the McConnell Creek area.

The area between Kaza Lake and the showings appears to be mostly underlain by porphyritic basalt pillow lavas that most likely belong to the Hazelton Group. Metamorphism does not seem important except near the showing.

The showing occurs on a knob on the top of which an elliptical area about 1,500 feet by 3,000 feet is dominated by outcrop. On the western slope is traversed by a gully oriented about north 40 degrees west that seems to be a shear. The knob is underlain chiefly by porphyritic basalts of varying phenocryst content. Rude pillows are evident in the east. A lense of tuffaceous limestone 10 to 20 feet thick outcrops along the northern part of the gully for about 300 feet. The bedding of limestone and lavas appears to strike about north 25 degrees west and dip about 30 degrees eastward. These rocks are cut by white quartz feldspar porphyry dykes that trend northwestward and are probably related to the Kastberg Intrusions and part of the dyke swarm from Scallop Mountain.

Microscopically the flow rocks are seen to be composed of 20 to 30 per cent phenocrysts ranging from mostly agglomerated masses of plagioclase (now andesine) to dominantly chunky pyroxene. The matrix is composed of very fine plagioclase, pyroxene, chlorite, and ilmenite in an insertal fabric. Metamorphism is fairly intense but locally variable. Pyroxene is largely replaced either by actinolite or chlorite. Plagioclase is sericitized and slightly epidotized, but

metals?
Copper

may also be slightly replaced by actinolite. The quartz feldspar porphyry and rhyolite ^{are} is composed of a few large resorbed quartz crystals and kaolinized orthoclase and some smaller chloritized hornblende needles in a very fine aplitic quartzofeldspathic matrix.

Sulphide minerals occur in ^{SEVERAL MANNERS} a number of modes; as an important accessory in highly amphibolized volcanic rock along the main shear, as discrete veinlike masses composed of actinolite, quartz, sulphide, calcite, and chlorite, ^d and as replacement in limestone. The main sulphides, in the rusty amphibolitized zone parallel to the shear, are pyrite and pyrrhotite with lesser chalcopryite. In the limestone most of the sulphides are chalcopryite. In the actinolitic veinlike masses, chalcopryite may be the dominant mineral. These "veins" occur in a slightly irregular manner but also chiefly strike northwestward and may be 60 feet long and up to 20 feet wide but are mostly much smaller. A grab sample from a freshly blasted pit in the limestone assayed: copper, 1.20 per cent; silver, trace. A chip sample along an amphibolitized zone 40 feet by 20 feet assayed: copper, 1.06 per cent; silver, trace.