

CENTRAL BRITISH COLUMBIA

F & S

(82L/13W)

By G.P.E. White

The F & S claims, owned by John Filek, are under option to Interior Stone & Marble Ltd. and are operated as a source of quartz for stucco dash. The claims are located near the headwaters of Niskonlith Creek, northeast of Pritchard.

During the quarrying operation scheelite and tungstenite (WS_2) in dolomite have been uncovered along the contact of the quartz body and the schistose country rocks. The tungsten minerals have been found in patches measuring up to 10 by 30 centimentres.

Soil samples collected below a scant A horizon between the quartz quarry and a coarse-grained granite about 0.8 kilometre to the east showed anomalous concentrations of scheelite using a gold pan and an ultraviolet lamp. Glacial clays and gravels are present in the area in variable thicknesses and it is possible that the anomalous scheelite has been transported from the northwest.

POTENTIAL CARBONATITE LOCALITIES

By G.P.E. White

Two properties containing carbonatite-like bodies were examined in 1979. These include the JTM claims (83D/3E) and the Sandy Victor (82L/16W) properties.

The JTM property, owned by John Morton, is located along the Mud River logging road 14 kilometres northeast of Blue River. Limited study has indicated a possible metabeforsite (metamorphosed dolomitic carbonatite) with enveloping ferroaugite-albite-perthite fenitization replacing granulite schists of quartz-albite-biotite or biotite-sillimanite-garnet composition. This carbonatite-like unit has been traced at one outcrop locality for 150 metres along strike and is greater than 4 metres in thickness. In its present form the unit is composed of a reddish brown residual soil containing elongate, oval fragments of metabeforsite up to 30 centimetres in diameter. Forsterite and chondrodite have been determined by X-ray analysis of the soil. Other minerals identified megascopically in the soil are phlogopite, limonite, a pyroxene, and magnetite. Coarse banding of the soil is exhibited by varying quantities of phlogopite.

Preliminary thin section study of the metabeforsite has identified dolomite, augite, phlogopite, calcite, probably ankerite, magnetite, pyrrhotite, and minor secondary chlorite and sericite. Variations in the composition of the metabeforsite are indicated by the percentage of dolomite to mafic minerals, with some samples containing about 70 per cent mafic minerals.

Fenitization marginal to the metabeforsite extends 1 metre into country rock schists and the fenite is also coarsely banded. Often a 5-centimetre band of ferroaugite-rich rock with interstitial albite and perthite separates the fenite and metabeforsite. This contact is usually sharp with the metabeforsite intrusive showing embayed and intersecting relations with the fenite. The fenite/schist contact is gradational.

Although the outcrops are limited, the metabeforsite/fenite appears to be sill-like and concordant with the regional schistosity. These criteria may at a later date indicate that these bodies are not true metasomatic replacements but may be limestone beds containing abnormally high rare earths. However, Rb-Sr dating at the University of British Columbia yielded an age of 370 Ma in this area for these carbonatite-like units