

007

The broad unit of Andesites outcrops south of Lynch Creek. Outcrop exposure is extremely poor as the rocks are covered by a thick layer of clay. Solomon (1960) considers that the clay probably represents tuffs and perhaps lavas that have been altered as a result of gold mineralisation, and later deeply weathered. It is more likely that the clay has developed as a result of the long weathering of the andesites. Although a shallow clay horizon extends north of Lynch Creek, only very deep clay formation develops over the andesites. As will be elaborated in the section relating to structure, the presence of clay is probably related to block faulting. There is no evidence to suggest that the clay has been derived from the distinct units of softer tuffs.

Intermediate Crystal Tuffs:

These are generally dark green, hard rocks. The texture is usually crystal and rock fragments in a fine grained, felsitic matrix. Essential minerals include feldspar, augite and quartz with magnetite and chlorite as accessories. Sericite, tremolite, epidote, chlorite and calcite often occur as alteration products. Fragment size is variable, ranging from several m.m. to several centimetres in length. In the larger fragments, reaction rims are well developed, and magnetite is generally abundant. Pyrite and possibly pyrrhotite are rare.

Generally, this broad unit does not appear to have undergone very much local shearing, or suffered any metamorphism as a result of folding. However, sample "K" shows some shearing. In outcrop this is expressed as small lenses elongated in the direction of shear. The usual outcrop form is generally as massive tors. Soil cover is very shallow.

In summary, earlier workers have had problems classifying this rock genetically. Sedimentary, sill and lava origins have been suggested. In view of present evidence particularly relating to the consistent persistence of variable crystal and rock fragments, and the relation of this unit to overlying units, it is felt that this is a broad unit of crystal tuffs of dacite-andesite composition (closely related to the andesites south of Lynch Creek). Solomon (1960) stresses that the environment in this area during the Cambrian was rapidly changing. Sections of this unit (rock locality "N") are reminiscent of pillow basalts in form, and it is suggested that this unit may be partly submarine in origin.