

E.L. 2/63THIN SECTION DESCRIPTIONS1973-74 FIELD SEASONNOTES ON ROCK SPECIMENS

In general these rocks are fairly similar. The majority are fine grained lithic tuffs with subordinate but variable crystal fragments and in some cases siliceous microscopic shards as well.

Most of the tuffs carry non-pyroclastic material in the form of sedimentary rock fragments and/or detrital heavy mineral grains and are then strictly "xenotuffs". With increasing proportions of non-pyroclastic material the tuffs grade into tuffaceous lithic sandstones. The pyroclastics are moderately sorted and bedded indicating aqueous deposition.

Further investigation of the heavy mineral suites, particularly in the more detrital rocks may be useful in terms of correlation.

Due to pervasive alteration (particularly chlorite) lithic fragments are generally indeterminate. Overall however basic-intermediate (broadly "andesitic") volcanism is reflected.

Chlorite alteration is of diagenetic-low grade (regional) metamorphic character. Relatively few rocks show evidence of contact metamorphism as distinct from metasomatic alteration. Development of fine grained biotite in the lithic sandstones probably falls into the contact-metamorphic character but its occurrence in one particular rock type is peculiar.

Metasomatic tremolite-actinolite is pervasive in some rocks and incipiently developed in others. The metasomatic alteration is evidently post-metamorphic, at least locally (821). Assuming the metasomatism reflects Devonian plutonism, as seems most likely, the andesine microgabbros (839, 840) are evidently pre-Devonian.