

PETROLOGICAL AND STRUCTURAL INVESTIGATION OF
WILLYAMA COMPLEX ROCKS, WIPERAMINGA HILL AREA,
SOUTH AUSTRALIA.

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ABSTRACT

The rocks of the Wiperaminga Hill area are metasediments and granitic rocks of the Willyama Complex. They have undergone metamorphism to upper amphibolite grade. The rocks of the area are predominantly mica schists, calc-silicates and granite gneisses. Associated with the metamorphism was a phase of isoclinal folding (Group 1) which resulted in a schistosity (S_1) being developed mostly parallel to layering. No fold hinges of this phase were seen in the area (i.e. no occurrences of S_1 not parallel to layering).

The generally E.N.E. trending and steeply dipping S_1 and layering are deformed by a second more open phase of folding (Group 2). A second schistosity S_2 is developed axial plane to these folds. In some locations S_2 replaces S_1 as the dominant schistosity.

The area has undergone a later retrogressive phase of greenschist facies metamorphism. Also at a quite late stage albitization and related brecciation of some calc-silicate rocks took place.