THE LATE PRECAMBRIAN GEOLOGY OF

THE WYACCA BLUFF - BUCKARINGA GORGE AREA,

FLINDERS RANGES, SOUTH AUSTRALIA

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ABSTRACT

Detailed lithostratigraphic mapping of the Late Precambrian sequence extending from the Tapley Hill Formation in the Umberatana Group, to the A.B.C. Range Quartzite in the Wilpena Group in the Wyacca Bluff - Buckaringa Gorge area, has indicated 18 mappable units. These may be lithologically uniform, or contain several distinct or gradational lithologies, ranging from almost pure carbonates to clastics with only minor carbonate content. Stromatolite growth proliferated during deposition of the Brighton Limestone and the morphology of these stromatolites is described. Minor stromatolite growth occurred during deposition of the upper parts of the Tapley Hill Formation and Etina Limestone Member respectively.

Deposition occurred under shallow marine conditions, in environments ranging from below wave base, to supratidal. Comparison with the Hallett Cove - Marino area suggests that similar environments prevailed in both areas, although not necessarily synchronously.

The sequence is located on the eastern side of a shallow southerly plunging anticline, which has been truncated on the western side by Wyacca Fault.

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