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3. EXPLORATION IN THE WART HILL PYROCLASTICS

3.1 GENERAL GEOLOGICAL SETTING

Rocks which are assigned to the Wart Hill Pyroclastic Formation occupy a 5km wide belt of open button-grass plains in the central part of the E.L. They extend from the Lewis River, where they are intruded by the Rocky Point Granite, to the north where they are unconformably overlain by Ordovician black shales, siltstones and conglomerates which comprise the Mt. Osmond syncline. The eastern contact is diffuse and gradational to the underlying Hudson River pyroclastics. To the west the Wart Hill Pyroclastics are overlain by basic volcanics and phyllites of the Mainwaring Group (see fig 3).

In the main, they are a thick monotonous sequence of creamy-grey coloured quartz-feldspathic crystal lapilli tuffs, lithic crystal tuffs (locally agglomeratic) porphyritic lavas, rhyolites and dacites. The predominant lithic fragments in the tuffs are ovoid in shape and consist of very fine grained, olive-green rhyolite which may be aligned to define a crude bedding.

Outcrop is generally good but lack of marker horizons make correlations difficult. It is not uncommon for lithology to be traceable for only a few tens of metres along strike. Field evidence, notably the persistence of the intercalated sedimentary units, suggest this is a function of 'facies changes' away from eruptive centres and a possible irregular topography rather than later tectonism. Nevertheless the pyroclastics always retain a strong penetrative fracture cleavage and this can be useful in distinguishing the fragmental rock from the more massive lavas. The main cleavage appears to be axial planar to the Osmond synclinal structure and is therefore of Tabberab^beran age.