

ii) Geology

A rapid geological reconnaissance of the track from 00W to 1000W was made and the rock chips from Jacro power auger holes between 700W and 987.5W were logged. The details are sketchily presented in plan 79.

West of the Mainwaring River the rocks consist of fine grained acid volcanics, weathered to a creamy buff or grey colour, and characteristically containing pale feldspar phenocrysts or crystals but no megascopically visible quartz. The presence of small quartz chips in a couple of the auger hole cuttings suggests some local quartz veining.

Immediately east of the Mainwaring the rocks are fine grained black (sometimes pyritic) siltstones and coarser lithic tuffaceous greywackes. The latter are clearly composed of acid volcanic detritus and reworked tuffaceous material and commonly contain small irregular to tabular fragments and disjointed 'beds' of black siltstone, indicative of turbidity and slumping during sedimentation. Small subrounded 'sulphide clasts', generally in the range 2-10mm, and composed of fine granular pyrite, were noted in several specimens of the lithic tuffaceous greywacke, notably at about 850 west and 550 west, regrettably not in outcrops (KR's 7411, 7420, 7421).

It is considered that the pyritic clasts may have had a similar origin to the black siltstone fragments with which they sometimes occur. That is, the pyrite was probably syngenetically deposited as lenses or thin beds interbedded with black (pyritic) siltstones and then (in part) broken up and redistributed as clasts by sedimentary slumping. A similar phenomenon was recorded in costean No. 5 on the Voyager 19 grid.