

Geological mapping - rock sampling

This confined to streams sampled and carried out in conjunction with sediment sampling. Thirty one rock samples collected, labelled: e.g. EI 15/76

1
4/6/82

Most samples contain several lithologies, a representative collection from up to 200m of stream. For sample locations and descriptions see Plan 1 and appendices ii). All descriptions are based on hand specimens.

Geology -Stratigraphy.

Dominated by fine grained sediments which are frequently calcareous, stratigraphy characterized by great lithological variety

- well sorted quartzites, siltstone and minor chert
- poorly sorted siltstone - greywackes and conglomerate
- carbonates very fine grained to conglomerates.
- acid tuffs and possible basic volcanics.

These sediments are probably equivalents of PreCambrian Concert Schists, Conah Quartzite and Cambrian Crimson Creek Formation, Dundas Group. The only sediments that can be confidently subdivided on basis of lithology and structure are the well bedded siltstone and greywacks of Adelaide Mine Creek belonging to the Dundas Group. Elsewhere the different lithologies are interbedded/juxtaposition showing a variety of deformation styles dependent on:

- a) lithology (siltstones greater tendency to be schistose)
- b) position in relation to major structural deformation zones.

Lithologies of greatest interest to exploration are the carbonates which are present in all areas excepting Mariposa and Tom Creeks. Several varieties occur;

a) slightly calcareous siltstone and fine greywackes commonly schistose pale cream pink - black, with brown weathering skin less than 1 cm thick. - These may form a considerable part of what has previously been mapped as Concert Schist e.g. No. 13.

b) Black siltstones alternately banded with thin carbonate bands 2 - 20cm thick. Typically these limestones are very hard, fine grained with orange brown stylitic weathered surface e.g. No. 15,21.