

Exposure is poor and non-continuous due to glacial moraine, ablation till and outwash gravels. The structure is simple with rocks appearing to be east-facing and east-dipping with only cross faulting hindering ready stratigraphic correlation. The Central Volcanic sequence can be summarised into three units.

### Unit 1

The most western unit is a readily mappable pale blue to grey medium-grained feldspar-phyric dacitic tuff with ash flow affinities, which overlies the pale grey fine-grained airfall tuffs and black shales of the Western Sequence. DDH TYN2 collared in the Western Sequence, intersects this unit.

### Unit 2

The dacitic tuff is overlain by a poorly exposed sequence (approximately 1.3km wide), of green hornblende and feldspar-phyric andesitic lavas, and crystal and crystal lithic tuffs with a coarse grained andesitic hornblende feldspar porphyritic rock. The porphyry shows intrusive character in the western half of the Basin Lake Grid where it clearly cuts across the regional strike. At Basin Lake to the east the hornblende feldspar porphyry, intersected in DDH BL4 (on line 30S), appears to have extrusive to agglomeratic affinities where interbedded with grey shales. To the north the relationship between the hornblende feldspar porphyries and the andesitic tuffs is not clear due to lack of outcrop.

Significant mineralisation appears to be confined to disseminated pyrite mineralisation and silicification at Leech Hill and line 6N (figure 55), which appear to be on the same stratigraphic horizon. These may be relict feeder zones to mineralisation up the stratigraphic column. Except for these two areas of disseminated mineralisation this unit is geophysically quiet.

### Unit 3

Overlying the hornblende-phyric rocks is a sequence of medium grained andesitic tuffs, minor dacitic tuffs, black shales, cherts and carbonates. This unit has an apparent thickness of 800m in Newton Creek but may diminish to 600m to the south at Basin Lake. The unit, which is characterised by above-average base metal values in residual soils, disseminated pyrite mineralisation and moderate to strong I.P. chargeability responses, appears to be highly prospective for Rosbery or Que River type mineralisation.

Syngenetic massive pyrite has been located in DDH BL4 (7m) and DDH HA5 (minor) with no significant base metals, although base metals are associated with disseminated pyrite, e.g. DDH's HA1 and 2.

North of a NW trending fault (north of Newton Creek), a change in stratigraphy occurs where dacitic tuffs with siliceous alteration are associated with disseminated pyrite and minor base metals.