

5.2 Geology/Geochemistry

The access track from the 5800N costean to the MAC-28 drill site was mapped (see plate MAC89/BB) and rock chip samples collected at 10m intervals and analysed for Cu, Pb, Zn, Ba, As, Ag, Cr, Ti and Zr. Results are included in Appendix 12. Lithological indicator elements confirm the mapped sequence of, from south to north, Andesite and minor dacite passing through high Cr (> 1000 ppm) and Ti/Zr (to 48) basalt with minor interbedded polymict andesitic lapilli volcanoclastic to andesitic/dacitic lava at the drill site. The presence of andesitic-dacitic lavas on 6000N, was not expected as Cr values from 'c' horizon soils on this line suggested basaltic lithologies. Base metal values from these rock chip samples were generally low with a maximum of 2400 ppm Pb from the polymict andesitic unit and 941 ppm Zn, 60 ppm As from the enclosing basalt.

5.3 Diamond Drilling

5.3.1 DDH MAC-28

Geology

DDH MAC-28, see plate MAC 161C for collar location, was designed to test the interpreted southern extension of the Que River alteration zone on 6000N, at an estimated easting of 4600E and at a depth of approximately 400m, i.e. below effective UTEM. The hole was also designed to provide stratigraphic information, particularly the depth of the interpreted Que-Hellyer host horizon, in a poorly drilled area.

A detailed log and petrographic descriptions are included as Appendix 13 while a section of the hole is included as plate MAC319 (see plate MAC 115 for legend). A summary log is as follows:

0 - 25	Dacite lava.
25 - 149	Basaltic lava breccia with intercalated andesite.
149 - 155	Polymict andesitic volcanoclastic.
155 - 716	Feldspar phyric andesitic volcanoclastics with polymict andesitic volcanoclastics from 481-490 and 546-563.
716 - 827	Alternating sericite, silica, pyrite alteration +fuchsite with andesitic lava.
827 - 891	Strongly sericite, silica+fuchsite, pyrite altered volcanics (Que River footwall style).
891 - 899	Andesite lava.
899 - 907.5	Strongly altered volcanics as above.

Geochemistry

Core grind samples from MAC28 are attached as Appendix 14. Initial interpretation of this data confirms the rock types as logged. Base metal values in the alteration zone are generally low. This is not unusual in this style of alteration at Que River.