1. SUMMARY

Areas of exploration activity in the Mackintosh district for the period May 1990 to April 1991 are shown on Plate MAC 318. Significant results are:

i) In the Southwell-Leven River area Pb, Zn and As stream sediment anomalies have been followed up by mapping which located a zone of sericite-pyrite ±silica alteration. This zone was surveyed with UTEM which did not locate any significant conductors.

ii) A re-interpretation of the diamond drilling and geophysical data south of the Que fault has indicated an alternate interpretation of the extent of the Que River alteration zone, previously thought to daylight at around 6200N. Lineament studies suggested the zone may plunge to the south beneath barren cover rocks. A diamond drill test of this concept (MAC 28) intersected a significant (+100m) zone of sericite pyrite±silica±fuchsite alteration similar to Que River footwall style alteration. This result significantly enhances the prospectivity of this area south of Que River.

iii) A diamond drill test (MAC 26) of the interpreted Que-Hellyer host horizon beneath the Charter dacite and of the base and precious metal mineralisation within the dacite produced mixed results. The interpreted Que Hellyer host horizon was intersected approximately 600m below surface and although unmineralised, was marked by potential host rocks.
Low grade base and precious metal mineralisation was intersected within the stringer system

viz.

0 - 58.4m	58.4m at 0.7% Pb, 1.15% Zn, 31 g/t Ag and 1.75 g/t Au
76.2 - 106.2m	30.0m at 1.6% Pb, 2.87% Zn, 10 g/t Ag and 1 g/t Au

Results from geochemical and isotopic studies in progress are required before further drilling can be recommended.

iv) DDH MAC 27 was drilled to test disseminated sphalerite rich mineralisation hosted by fuchsite altered volcanics in the vicinity of the Mount Charter dolerite area (best 94.7m of 0.52% Zn). This hole failed to intersect the interpreted Que-Hellyer host horizon at the base of the dacite due to a thick (570m) hangingwall sequence and fault complications.