

3) Litho-geochemical sampling:

23 rock samples collected for detailed lithological study, of which 20 were submitted for assay of Cu, Pb, Zn, Ag and Au.

4) Maxmin EM survey:

Lines 53N to 59N read at frequency of 1777 Hertz, total 3.3km surveyed. Additional frequencies of 222 Hz, 444 Hz, 888 Hz and 3555 Hz were read on lines 55N and 59N.

5) VLF EM Survey:

Lines 53N to 59N read using transmitting station in Japan, total 3.3km surveyed.

6) Staffing:

The following total man-days work was completed in the field.

i) Geological staff	5 days	(F. G. FitzGerald)
ii) Consultant geophysicist	4 days	(J. R. Bishop)
iii) Field assistants - gridgers	21 days	(4 men)

3. DISCUSSION OF RESULTS1) Geology

Several brief comments can be made as a result of the initial geological mapping of the area; this data is summarized on Figure 8.

The area enclosing the principal EM response is covered by unconsolidated glacial deposits. These deposits are unusual within the Mt. Read Volcanic belt in that they occur along a topographic ridge and that they are composed almost entirely of volcanic clasts within a gritty matrix. Electrical soundings were made by Scintrex Pty. Ltd. on line 55N in 1972-73 and line 56N in 1973-74 to determine the depth of the glacial cover. The surveys indicated possible depths to bedrock of between 5 and 12 metres, the larger depth being supported by interpretation of the IP resistivity profiles.

The glacial deposits are made up of blocks as large as 5m x 3m of predominantly felsic lavas and massive (welded) ignimbrites with lesser basic volcanics and chloritic schists and rare Owen Conglomerate. The volcanic composition of the clasts and the gritty matrix suggests that the deposits were locally derived.