

4. REGIONAL SURVEYS

Previous exploration and the discovery of high grade sulphide lenses near Wart Hill had indicated that the greatest potential for the target (Rosebery type) mineralization existed within the 'Wart Hill Pyroclastics'. These consist of a complex assemblage of rhyolitic lavas and associated pyroclastic deposits with several minor pyritic shale and siliceous sandstone/conglomerate interbeds. Structural indications are that the group dips and faces steeply to the west and appears to be semi conformably overlain by (acid volcanic) epiclastics, siltstones and shales of the 'Western Sequence'. The 'Wart Hill Pyroclastics' thus appear to represent the uppermost, youngest (?) section of the acid volcanic sequence exposed at Elliott Bay and thus may be analogous to the western part of the 'Central Lava Belt' of the Mt Read Volcanics north of Queenstown.

It is considered noteworthy that all the significant, known Pb-Zn-Ag deposits of the Mt Read Belt (Rosebery, Que River, Hercules) occur within a couple of kilometres of the Central Lava Belt-Western Sequence contact.

The 1982-83 exploration programme was aimed at definition of drilling targets within the favourable stratigraphy represented by the 'Wart Hill Pyroclastics'.

It was considered that this could best be achieved systematic electrical geophysical coverage.

Dipole-Dipole Induced Polarization-Resistivity was chosen for the job, mainly on the basis that a large Pb-Zn sulphide body could reliably be expected to be chargeable but not necessarily conductive (Webster & Skey, 1979).