

position, interpreted to be within the Hercules host rock horizon, enhances their favourability as primary targets.

The gradient array data has proved to be an excellent mapping aid in the Dobsons Creek area. It has defined three distinct north-south trending zones which appear to have been offset by an west-north-west trending fault, on or close to, line 3600S. The offset is about 300-600ft north-block-west. The western zone is characterised by high chargeability backgrounds of 32-46 mv/v associated with resistivities of between 400-600 ohm-metres. Within this zone there are many significant increases in the chargeability level. The central zone typically consists of chargeability backgrounds of 24 mv/v and resistivity backgrounds of 2500 ohm-metres. Some significant anomalies occur within this zone including the highly chargeable wedge over soil geochemical anomaly 'A' mentioned above. The eastern zone contains chargeability backgrounds of 16 mv/v and resistivity backgrounds of 10,000 ohm-metres  $\pm$  3000 ohm-metres. There are few significant anomalies within this section.

#### 5.5.7. CONCLUSIONS

The Dobsons Creek area contains both encouraging soil geochemistry and coincident I.P. anomalies. It also contains a belt of rocks interpreted to be the Hercules host rock horizon. The area has been mapped in 1972 by Reinhardt et al but this work is now recognised as inadequate for our purposes. Further geological mapping is required, especially over I.P. anomalies, to define the structure and stratigraphy of the area. The Hercules host rock horizon probably represents one of the prime geological targets on the West Coast of Tasmania. Therefore an attempt should be made to trace the Hercules host rock horizon, south from the Hercules Mine area into the Dobsons Creek area to provide additional information.