

4.

Anomaly IX appears to plunge to the north and its source may be as much as 100m deep on line 1800N. On line 1000N at 4260E it is best defined. There it should lie within 20m of the surface. The response of anomaly IX is dominated by that of anomaly X which lies 130m to the east. Anomaly IX has no resistivity expression. It is within the very resistive rocks of the southwest corner of the grid.

Anomaly X except for line 1000N coincides with a low resistivity zone. This is most clearly seen at 4680E on line 1800N where the anomaly is also best developed. The source has a near vertical dip and lies within 25m of the surface. There is no evidence for a plunge to anomaly X.

#### ANOMALY XI

This is a poorly defined low amplitude anomaly situated within Dundas shales. The source is within 15m of the surface at 3060E on line 3600N. This is the best expression of anomaly XI.

#### D. RESISTIVITY RESULTS

The range of resistivity values encountered ranged over four orders of magnitude from less than 4 ohm metres to over 40,000 ohm metres. Resistivity values depart from the background of 200 ohm metres over some chargeability anomalies and four generally anomalous areas. Two of the latter are areas of very high resistivity and two are areas of very low resistivity. These are shown on the interpretation overlay. The areas do not correlate directly with topography and so must be due to geologic causes. The high resistivity areas are truly exceptional. Values of over 5000 ohm metres are usually encountered only over unweathered intrusives or highly siliceous sediments. The eastern resistivity high appears to be associated with the basalts outlined by magnetic zone A. The south western resistivity low is likely due to carbonaceous sediments. The central eastern low occurs over an area of glacial cover. Both low resistivity areas are also areas of high chargeability.

#### RECOMMENDATION

Anomalies worthy of further investigation have been grouped into four priority ratings. A summary of the work recommended is outlined in Table 3.

#### FIRST PRIORITY

Anomaly II:

This is considered the most important anomaly for two reasons. Firstly there is the close association of EM and SP anomalies with the chargeability zone. Secondly favourable mineralisation has been observed in the area of line 3200N. In order to determine the most favourable location for detail probing investigation (trenching or drilling) the following work is recommended.

- (a) SP traverses of line 2600N from 3500E to 4100E and line 2800N from 3500E to 4200. Localised anomalies (80 mv peak within a half maximum width of 100m) should be detailed with readings every 10m and 5m over the anomaly peak. In this regard the SP anomaly on 3200N should be sampled every 10m from 3440E to 3620E and every 5m from 3510E to 3580E. Line 3400E should be sampled every 10m from 3490E to 3760E and every 5m from 3490E to 3580E as well as 3700E to 3780E.
- (b) EM coverage of line 2800N from 3400E to 4100E line 3000N from 3400E to 4200E line 3200N from 3200E to 3900E and line 3400N from 3200E to 4000E.

Transient EM is recommended for this work because it will probably give more diagnostic information than the crone shootback method.