

no attempt at identifying phenocrystal phases, grain sizes or alteration types has been made. Further geological input in the Dobsons Creek area will be necessary to trace the Hercules Host Rock horizon into the area.

#### 5.5.5. GEOCHEMISTRY

(refer to 1:10,000 Soil Geochemistry Contour Plans AO-525-0059, 0060 and 0061 and Appendix 2. )

Soil samples were taken at 100ft intervals over all new lines and over I.P. anomalies on the old lines. Samples were taken from nominal 'C' horizon and analysed for Pb, Zn, Cu, Fe and Mn by A.A.S. after perchloric/nitric acid leach by Analabs of Perth. The data were plotted on 1:5,000 plans and contoured. Contour intervals of 50, 100, 200, 500 and 1,000 have been used for all three elements based on statistical analysis in the Stitt area. The contours were then photo reduced and plotted on 1:10,000 plans.

In general, background levels of the new sampling were slightly higher than those of the old sampling for both Pb, Zn and Cu. This is probably because of the slightly different analytical techniques used. Anomalous areas for the three elements from both generations of sampling showed good correlation.

Of the three elements Pb, Zn and Cu, Pb shows the greatest range and distribution with values up to 1500 ppm. Zn anomalies usually coincide with Pb anomalies but are of much lower amplitude, except for one value of 1560 ppm, while copper is almost completely dispersed with only nine samples analysing more than 50 ppm (95 ppm maximum). Thus the relative mobility of these three elements in this environment is indicated by the sampling.