

Widespread Quaternary moraine is recorded in the general area of Howards Road on the Zeehan 1 Mile Geological Sheet. Exposures along tracks and creek traverses indicated morainal cover is thin in some places at least. This plus lack of gold working in the morainal material suggested the gold was related to a fairly local bedrock source.

Work Completed in 1982. In order to locate the approximate position of, or low grade halo associated with, the primary source of the detrital gold, and at the same time eliminate the possibility of morainal transport from outside the E.L., four lines were soil sampled into bedrock in the vicinity of the above-mentioned drainage anomalies. These lines are 54500N, 55050N, 55500N and 56500N. VLF-EM and ground magnetic surveys were also carried out along the lines.

Locations of the augered soil samples are shown on DRG No. K555-40 and chemical analyses of the -20 mesh samples A138904-A139683 in Appendix V.

Results. Widespread low level anomalous gold values were located on lines 55050N and 55500N, especially between 7290E and 73700E. These anomalous results are plotted on DRG No. K555-40. The highest gold-in-soil value was A139370 (0.2 ppm) at 55050N/73340E, in the centre of the gold anomalous zone. Immediately to the east, from about sample A139380 eastwards (73500E) there is a general increase in Cu-Pb-Zn-Ni-Co-Cr values. Values occur up to 220 ppm Cu, 500 ppm Pb and 380 ppm Zn.

Eastward again on line 55050N, samples A139407 (73760E) to A139417 (73860E) contain elevated Cu-Zn-Pb, with values up to 970 ppm Cu, 125 ppm Pb and 380 ppm Zn in the vicinity of a dolerite/felsite contact.

All geochemical, magnetic and VLF-EM data are at present being computerised. Some statistical