

## 9. HEEMSKIRK GRANITE GEOLOGICAL MAPPING EL 11/76

Roger Poltock completed geological mapping of the Heemskirk Granite he began during the 1980-81 season. His report is appended (appendix 10). His mapping was based on east-west traverses spaced at approximately 600 metres. An interpretive geological map and a map of alteration zones with mineralisation and analysed sample locations with assays are included in the list of plans (plans 6,7). This work has demonstrated the apparent layered nature of the upper part of the granite. Poltock has mapped alternate bands of coarse Red, porphyritic fine grained Red, medium grained Red, fine grained porphyritic white, fine grained white and coarse grained white granites some of these units have chilled contacts, others are gradational.

Poltock mentions a possible 'third phase' granite beneath the White Granite on the coastal plain and considers this area to be the most prospective outside the South Heemskirk-Federation and St.Dizier areas. This is based on the number of small workings, greisenised aplite dykes and sericitic alteration associated with this area. This is the only area on the Heemskirk Granite where greisenised aplites have been recorded.

Poltock's mapping has added considerably to the knowledge of the Heemskirk Granite. As well as providing a detailed and comprehensive geological map, his work has confirmed that the style of mineralisation of the Sweeneys, Anomaly 1 and Globe deposits is unique to the south-east margin of the granite. He has also revealed other potentially interesting areas, notably the west coastal plain.