8. HORDERN HILLS (EL2366)

8.1 Introduction

Hordern Hills prospect is located 12 kilometres south of The Granites, and comprises the nearest known outcrop of Davidson Beds to The Granites. Reconnaissance rock-chip sampling in 1989 located a well developed BIF sequence with associated graphite schist, garnet schist, manganiferous chert and mafic rocks: the stratigraphic package is similar to that at The Granites and Dead Bullock Soak. This work also located a gold anomalous zone (peak 0.11ppm Au) with a strike extent of at least 500 metres. Arsenic values were however, found to be very low, usually at or below the 100 ppm detection limit.

Despite the relatively low tenor of the gold anomaly and the apparent absence of arsenic, follow up testing was considered justified, if only because of the proximity and stratigraphic similarity to The Granites. During 1990, a wide spaced RAB programme was therefore completed, and provided sufficient incentive for follow up costeaning, results of which in turn warranted deeper "hammer RAB" open hole percussion drilling (refer (project) Annual Exploration Report for Period March 1990 to February 1991).

During the current reporting period the structural deformation and lithologies were mapped in detail over the portion of the prospect which had previously been RAB drilled and costeaned. Some rock chip sampling was also undertaken.

8.2 Work Undertaken

The area was mapped at 1:5000 scale using the existing 400 x 50 metre grid - extra pegs were surveyed into the base-line at 100 metre intervals between 26 400E and 31 200E, and selected other lines extended to cover outlying outcrops. RAB chips were also re-logged, as well as spoil from the costeans.

Air photographs from the Grimwade-Hordern Hills series, runs 1 and 2 were interpreted at 1:25 000 scale.

8.3 Results

The detailed 1:5 000 mapping confirmed the delineated exposures of Blake, Davidson and Madigan Beds with RAB cuttings also indicating the presence of basic intrusives. White quartz veins occur in 'reefs' parallel to regional schistosity and smoky quartz in discreet cross-cutting veins. Metamorphism reached at least lower greenschist facies. A plan entitled 'Hordern Hills Interpreted Geology' appears with the text.

Rock chip sampling returned only weakly anomalous gold and arsenic values which were entirely confined to the Madigan Beds.

A full description of the work undertaken and results are given in the attached appendix.

8.4 Plans

| Drawing No. | Title | Scale |
|-------------|--------------------------------------|---------|
| 700-1484 | Hordern Hills Geological Map Sheet 1 | 1:5 000 |
| 700-1485 | Hordern Hills Geological Map Sheet 2 | 1:5 000 |



