

Exploration Licence 9/66 covers 637 sq. km, situated along the West Coast Range between Mt. Murchison and Macquarie Harbour (Fig. 1). This licence area incorporates four previous exploration licences held by The Mount Lyell Mining and Railway Company Limited (E.L.'s 9/66, 10/69, 41/71 and 21/76) which were amalgamated into a single licence (E.L. 9/66) on 5th December, 1978. The licence is currently subject to three separate operational agreements as follows:

<u>Section</u>	<u>Area</u>	<u>Equity</u>
E.L. 9/66A (Mt. Tyndall)	173 sq. km	Mount Lyell (30%) - Getty Oil (40%) C.G.F.A. (30%)
E.L. 9/66B (Sedgwick-Darwin)	413 sq. km	Mount Lyell (60%) - Getty Oil (40%)
E.L. 9/66C	51 sq. km	Mount Lyell (100%)

Exploration programmes to locate economic Cu-Pb-Zn-Ag-Au deposits in the Cambrian Mt. Read Volcanics continued on E.L. 9/66 during the 1980-81 year (26.6.80-24.6.81). Detailed exploration, including 5 diamond drill holes (total 1431 m), was conducted on the Howard's Anomaly, East Tyndall, Basin Lake, Henty River, Selina and Spicer Grids. Minor detailed work was also conducted on the West Tyndall, Rolleston, Lake Margaret, Beatrice and Jukes Pty. areas. Summaries of these programmes are presented in Figure 2 and Table 1.

A significant zone of pyrite mineralisation was located on the Selina Grid, east of the baseline, along strike to the north of a zone of Pb-Zn-Ag soil geochemical anomalies. A broad zone of pyrite mineralisation was also located at Basin Lake in D.D.H. BL4 within andesitic tuffs and black shales. Rock chip sampling defined further zones of anomalous silver values at Howard's Anomaly, including up to 310 g/t Ag on line 19N, and 10 m of 73 g/t Ag on line 21N. Diamond drilling of this zone was in progress at the end of the 1980-81 year.

Exploration expenditure during 1980-81 was \$489,052, comprising \$323,940 (66%) on the Mt. Tyndall area and \$165,112 (34%) on the Sedgwick-Darwin area. Expenditure on E.L. 9/66 since the original licence was granted on 5th February, 1967, totals \$3,165,327 to 24th June, 1981. Major expenditure categories during 1980-81 were Diamond Drilling (21.4%), Salaries and Wages (20.9%) and Geophysics (18.7%). The unit drilling cost for the 1431 m drilled during 1980-81 was \$63.01/m.

Exploration proposed for the 1981-82 includes the evaluation of new and partly tested targets by diamond drilling, further definition of anomalous zones by detailed geological, geochemical and geophysical surveys and evaluation of prospective areas by reconnaissance surveys. Proposed diamond drilling includes 7 diamond drill holes (totalling 1550 m) comprising 18% of the exploration budget. Proposed expenditure for the 1981-82 programme is \$603,616. See Figure 3 and Sections 3, 4 and 5.

2. EXPLORATION COMPLETED 1980-81

2.1 HOWARD'S ANOMALY (P. Komysan)

2.1.1 Introduction

Work during the 1980-81 field season generally consisted of follow-up of anomalous areas established during 1979-80 (see Meares, et al, 1980).

Two costeans were recleared, two new costeans were established, two drill sites prepared and a 300 m access track to a drill site was established.