

1. INTRODUCTION (R.M.D. Meares, J.G. Purvis)

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 1981-82 year (25th June 1981 - 30th June 1982).

Detailed exploration, including 1314m of diamond drilling, was conducted on the Selina-Dora-Spicer, Red Hills, East Tyndall-Howard's Anomaly-Basin Lake and Jukes Pty. grids. Five drill holes were completed, and in addition, a drill hole at Howard's Anomaly (HA5) which was commenced in 1980-81, was completed in 1981-82. Testing of all significant near-surface anomalies has now been completed in the Selina-Dora-Spicer belt, on the Jukes Pty. grid, and on the Howard's Anomaly silver zone.

Reconnaissance stream sediment surveys were carried out in the Henty-Yolande and Huxley areas. A Dighem airborne EM survey was conducted at Huxley, and also in the Bird River area south of the EL. In addition, a detailed airborne magnetic survey was carried out in the central section of the licence area.

Summaries of all work undertaken in 1981-82 are presented in Table 1 and Figure 2.

The most significant result of the years work was the recognition of the potential of the volcanic sequence in the Huxley area, extending from Mt. Huxley to Whip Spur. This belt contains two Rosebery-style footwall/hangingwall alteration zones, minor pyrite and barite occurrences, and moderate order Pb-Zn stream sediment anomalies. In addition, the only significant Dighem EM anomaly located during the Huxley survey occurs close to a favourable alteration contact in the NE section of this belt.

The only other result of note was the intersection in drill hole JP2 at Jukes Pty., of 14.4m averaging 1.54%Cu, 1.55ppm Au and 6ppm Ag.

Exploration expenditure during 1981-82 was \$627,725, an over-run of \$24,109 on the budget figure of \$603,616. Expenditure on the Mt. Tyndall area was \$387,566 (62%) and on Sedgwick-Darwin \$240,159 (38%). Total expenditure on E.L. 9/66 since the original licence was granted on 5th February, 1967, up to 30th June, 1982, is \$3,793,052. Major expenditure categories in 1981-82 were:

Salaries and Wages	26%
Access	16%
Geophysics	18.5%
Diamond Drilling	14% (At a unit cost of \$67.41/metre)

The primary objective of the proposed exploration programme in the 1982-83 year is to accelerate the drill testing of prospects already delineated on the EL by raising the expenditure on diamond drilling to \$224,000, 36% of the total proposed budget of \$619,065. The drilling as planned, will be split between Red Hills (1500m), Henty Fault Zone (900m) and Huxley (800m). A major programme of comprehensive surface work is planned at Huxley, involving geological, geochemical and geophysical surveys, prior to drilling. See Figure 3 and Sections 3 and 4.