

5. NICKEL PROSPECTS IN THE SERPENTINE BELT.(A) Geophysical and Geochemical Results.

Although the magnetic results in the Cuni area were rather disappointing, several traverses in the southern extension were read with a magnetometer during the 1957 survey. It was hoped to find the contact between the Dundas sediments and the serpentine, but the results were not encouraging from this aspect.

A well-defined magnetic anomaly was obtained on traverse 1200S at 1850E and on adjacent traverses. Soil samples were taken where indications were obtained with one or both of the geophysical methods, and these samples were assayed for copper and nickel.

Soil samples showed a maximum nickel content between 1700E and 1850E on traverse 1200S and a trench was dug at 1850E, the position of the magnetic anomaly. The trench revealed limonitic and siliceous material in strongly weathered serpentine; a sample of the limonitic material sent to the Mines Department Laboratory in Launceston gave, on analysis, a nickel content of 0.35%.

An easterly dip was indicated by the geophysical results and a drill site was therefore selected at 1200S/1900E, the hole to be drilled westerly in the direction of the traverse at a depression of 45°. The results from this drill hole (M23) are shown on Plate 11. The core was assayed in sections of 10 feet and 20 feet and the nickel values are plotted over the sections of the hole. The hole was in serpentine and bronzitite over its whole length, but core recovery, especially in the first 70 feet, was poor. The nickel values reach a maximum of 0.36 percent between 31 and 51 feet and decrease gradually from the maximum in both directions; values above 0.1 percent are spread over a bore hole length of about 100 feet.

(B) Drill Hole M23.

Angle of Depression :	45°
Bearing :	262° magnetic
Length of Hole :	170 feet
Position :	1200S/1900E on the 1957 geophysical grid.
Drilled :	11th July to 2nd August, 1957.
Geology :	In serpentine and pyroxenite throughout.