UR 1954/72

TDH/3

12th April, 1954.

MEMORANDUM:

PROPOSED GEOPHYSICAL SURVEY OF HAMPSHIRE MAGNETITE DEPOSITS.

In accordance with your instructions
I visited the Hampshire Magnetite Deposits on
the 2nd instant and laid out, pegged and surveyed
the lines along which the Bureau of Mineral
Resources had decided to conduct a magnetometer
survey.

This survey is at present to be confined to two East-West lines running on either side of the open cut. These are shown on the attached plan, which indicates that "A" line is pegged every 50 feet to 600 feet and "B" line to 550 feet. The figures shown against each peg are the heights in feet above the lowest peg (B 50).

A report by me in September, 1952, gives a general account of the deposits, which may be described as lenses of magnetite occurring in small roof pendants of the granite magma and coursing generally north and south.

Granite outcrops at either end of the two lines and the approximate boundary between it and the magnetite is shown on the plan.

A sample taken over 10 feet in the open cut showed on analysis

17.3% Insoluble

12.2 Fe0

52.0 Fe203

which is equivalent to 40% Magnetite and 28.5% Limonite. The % by weight of the magnetic concentrate was 46%, containing 84.5% magnetite and 15.5 limonite.

Sgd. Terence D. Hughes

GEOLOGIST

The Director of Mines, HOBART.