



Report on Magnetic Tests made on Drill Core from Broken Hill submitted by A.J. Keast

by L.A. Richardson

## DEPARTMENT OF SUPPLY & SHIPPING MINERAL RESOURCES SURVEY

## REPORT ON MAGNETIC TESTS MADE ON DRILL CORE FROM BROKEN HILL SUBMITTED BY A.J.KEAST 23/6/19hb.

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At the request of this Branch a collection of cores was sent by the Zinc Corporation for the purpose of magnetic orientation of bedding planes. The collection consists of 7 pieces mostly of short length.

Tests show that the permanent magnetisation and susceptibility of the cores are low. One piece however, exhibits magnetic susceptibility of 25 x 10-6 e.g.s. units and transverse permanent magnetisation of intensity 4 x 10-6 e.g.s. units. The results show that magnetic orientation of cores from rocks of this type could be made and the amount and direction of dip of bedding and/or other structural features such as schistosity determined providing that particulars of the direction and inclination of the drill hole were known.

It is recommended that more specimens be obtained from Broken Hill. In selecting and preparing the specimens the following requirements should be borne in mind:-

- 1. The core should show bedding other structural features such as schistosity. Different types of rock should be included.
- 2. The direction, inclination from the horizontal and depth from which core was taken should be stated.
- 3. The pieces of core should be at least 4" in length.
- 4. The top of the core, or the end nearest the drilling machine, should be marked. Where this is not possible alternative values for strike and dip have to be given from orientation results.

CANBERRA, A.C.T.

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