UNDERGROUND WATER IN TASMANIA

The underground water supplies of Tasmania have been developed to only a small extent.

In the early settlement of the State numbers of hand dug wells were sunk in certain districts. These wells provided water for domestic purposes, and probably also for general farmyard purposes. The supplies were not always of the best quality and they gradually fell into disuse, although a few wells yielding good quality water are still used for general household and farmyard purposes. In addition many other wells have been sunk in order to provide watering points for stock.

Ground water has not been utilised for municipal supplies or irrigation in Tasmania. The only industrial use so far attempted is that of providing a limited amount of boiler water for railway locomotives.

During the years 1920-1925 investigations of underground water resources were undertaken by the Geological Survey. The most suitable areas in Tasmania were selected and the following publications issued, together with geological maps etc.

(1) Underground Water Supply Paper No. 1
"The Midlands"

(2) Underground Water Supply Paper No. 2
"The Jericho-Richmond-Bridgewater Area"

(3) Underground Water Supply Paper No. 3
"The Richmond-Bridgewater-Sandford District"

(4) Underground Water Supply Paper No. 4
"The Campbelltown-Conara-St. Mary's District".

These investigations have shown that the rock types occurring in, and the geological structure of, these districts are such that no extensive basin of artesian or sub-artesian water exists. There are, however, a number of small local basins in which supplies of sub-artesian water are present. These supplies occur mainly in Triassic sandstones but also in other formations such as alluvium, hill detritus, Tertiary sands and possibly Permo-Carboniferous mudstones.

The quality of water available will not be large, but will be sufficient for some of the requirements. Pumping tests on 13 bore holes sunk by Government Drills proved that the yields from these wells ranged from 136 to 700 gallons per hour.

The experience gained in drilling Triassic sandstones in different parts of the districts showed that the water occurred in beds separated by more or less dry beds. Up to the present the greatest depth to one of the main water bearing beds has not exceeded 225 feet. It may be reasonably anticipated that water supplies will be met with at depths not exceeding 225 feet and often at the moderate depths of 20 to 30 feet.

The waters from the bore holes are found to be generally suitable for providing supplies for stock,

and this represents the most important use of the water. A few are suitable for dringking and household purposes, but the remainder are useless for this purpose. The quality for irrigation purposes ranges from fair to bad, and with those of poor and fair quality care would have to be exercised in the selection of the soil and the drainage thereof.

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23rd March, 1939