

Underground water investigations of the Launceston Tertiary Basin

W.L. Matthews

Field investigations into underground water occurrences in the unconsolidated sediments of this basin have been completed. Compilation of the results of the investigations is proceeding.

Drilling in the western part of the basin indicated the presence of supplies of sub-artesian and artesian water, stored in fine to medium grained sand beds interbedded with clay beds, in quantities that could be used on a small scale for irrigation. Indications from pump tests suggest a well constructed bore could be expected to deliver, in some areas at least, up to an acre inch of water per hour. The water quality is variable although most bores encountered water with less than 1000 parts per million of dissolved solids. Investigations have been confined mainly to depths of up to 500 ft but sand beds are known to occur at lower levels. Little is known of the water potential of these lower beds.

In the eastern part of the basin, in particular the southern half, fine gravel beds occur which are capable of supplying large quantities of water. Pump tests at lower rates suggest a well constructed bore could deliver of the order of up to 4 acre inches of water per hour in some areas. The quality of the water over much of the area is fair to poor although water of similar quality has been used for irrigation in some parts of Australia. The presence of relatively permeable soils at some locations in this area gives encouragement to the possibility that some of this water will be suitable for irrigation.

[1 May 1972]