

Underground water prospects at Wattle Hill.

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An examination of Mr D.C. White's property near Wattle Hill (south-east Tasmania) followed the owner's request for advice on the possibility of obtaining subsurface water for irrigation purposes. The area investigated included some hundreds of acres bounded by Wattle Hill road to the south and Iron Creek to the north. The dominant rock type is Tertiary basalt, which forms a moderately dissected plateau sloping gently to the north. The basalt overlies sub-horizontal poorly-jointed Permian(?) sandstones which are exposed in the banks of Iron Creek.

The owner desired some 200-300 gal/hr to irrigate gravitationally from a proposed bore sunk on an isolated basalt hill. The catchment area is approximately 200 acres and the basalt, standing some 150 ft above creek level, is drained by a number of springs and soaks. Most of these are intermittent, but at least two on the western side are permanent and supply an estimated 100 gal/hr to a small intermittent creek. It appears probable that much of the subsurface water in the vicinity of the proposed bore is drained in this manner.

Underground water, if present in basalt, is contained within joints and fissures and much of the success of a bore depends on the number, if any, of such water-carrying cracks intersected during drilling. Consequently, even though water may be present, success is often not guaranteed. Although the amount of water desired by the owner is small and may well be obtained by drilling on the proposed area, it would appear judicious to dam the water already flowing from springs, rather than attempt what may well be an unsuccessful or inadequate bore.

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