

REPORT ON THE POSSIBILITY OF OBTAINING UNDERGROUND
WATER ON THE PROPERTY OF MR. H. DOWLING, ROSS.

This property is situated half way between Ross and Campbell Town and extends from the main road in an easterly direction for three miles. It is desired to obtain a supply near the house between the main road and the railway.

The surface is largely occupied by sandy material which at shallow depths gives place to a mixture of sand and clay. Basalt of Tertiary age outcrops at numerous localities. The sandy formations directly overlie the basalt and are of small thickness. It is difficult to determine the thickness of the basalt, but it probably does not exceed 100 feet. Tertiary sands and clays underlie the basalt in the valley of the ancient Macquarie River. They may perhaps not entirely fill the old valley, in which case the bedrock would be diabase or Trias-Jura sandstone.

Water would be obtained in the sandy deposits overlying the basalt. These are, however, very thin and the supplies would be small and unreliable in dry weather. The deposits appear thickest near the railway and along a small narrow unnamed creek. The shallow hole between the house and the railway has a supply of water in it, but the yield is not known. Full advantage could be taken of this supply in the formation by deepening the hole down to the basalt.

Any bore hole sunk for deeper and larger supplies would pass into the basalt. This rock often yields supplies of water, but much depends upon the type of this rock. The upper layers are vesicular and jointed and might yield a supply, but the lower ones cannot be observed. Supplies would probably also be obtained when the basalt was passed through, especially if Tertiary sands and clays were encountered.

The quality of the water cannot be foretold, but only determined when a supply is obtained. As the supply near the house is required for domestic purposes it may be stated that very good quality water is required for this and is more difficult to obtain than supplies suitable for livestock.

The above remarks with regard to the shallow surface deposits and the basalt apply to all the eastern part of the property.

(Sgd.) P.B. Nye.
GOVERNMENT GEOLOGIST.

Hobart.

3rd July, 1925