

REPORT ON UNDERGROUND WATER AT
HAGLEY SCHOOL FARM

The school farm comprises some 180 acres of land situated on the northern side of the Bass Highway immediately to the east of the township of Hagley in the northern part of the State. The farm is approximately 19 miles distant from Launceston.

During the inspection of the farm I was accompanied by the Principal, Mr. Mazlin, who drew my attention to two water holes within the limits of the farm. One of these water holes was reported as never going dry.

A well has been sunk near the Farm buildings. This was reported as having been pumped dry, but no information was available as to the rate of flow of the water into the well. The depth of the well was reported as 30 feet.

Local information records that numerous wells of about 40 feet in depth have been sunk within the district.

The country in the vicinity of Hagley is composed essentially of Tertiary sediments, chiefly clays with some gravels, with some of the higher lands capped with Basalt. The Basalts have weathered to give a deep chocolate soil. Although only a few outcrops occur, fragments of weathered Basalt do occur in the fields.

The higher ground of the farm is composed of basaltic soil resulting from the decomposition of Basalts which are visible in a disused quarry situated just to the east of St. Mary Church Lane. At this point there is a quarry face of about 12 feet in depth of fresh Basalt.

At several points along the boundary of the basaltic area water holes occur of which the two water holes on the farm itself are typical.

The road from Hagley to Rosebank has been diverted to go round swampy ground about mid-way between the two places. On a parallel road about a mile to the east water holes occur at the approximate boundary of the Basalt. It is suggested that these holes occur on the clayey surface of the tertiary sediments immediately below the decomposed Basalt through which the water has percolated.

The occurrence of numerous wells in the district suggests also that the Tertiary sediments are not barren and that at least some water has entered the series in which the highest water table appears to be from 30 feet to 40 feet below the surface.

To test the farm area by boring it would be advisable to bore at a position in the paddock immediately to the west of St. Marys Church where basaltic soils occur. The height at this point above the general level of the flat would be perhaps 40 feet. This bore should meet the water table from which the water holes originate within 40 feet. If the bore hole is continued the water table of the

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many wells should be met within 100 feet and still further water may be won from lower levels.

It is possible that this bore may meet fresh basalt within the first 40 feet. It would be advisable to bore through the Basalt into the tertiary sediments to test that series for water.

No estimate can be made of the quantity of water available from the bore nor can its quality be anticipated.

The information gained by boring will give some indication as to quality of water and will prove the depths at which it occurs. Should boring fail to yield a sufficient supply, consideration could then be given to the question of sinking a well for the purpose of giving greater storage underground than would be available in a bore.

Signed: H.G.W.Keid,
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