

REPORT ON POSSIBILITIES OF OBTAINING SUPPLIES OF
UNDERGROUND WATER ON THE PROPERTY OF MR. F. WALKER, LALLA.

Mr. Walker's property is situated on the northern foot-hills of Brown Mount and about 30 chains south-east of the railway station of Lalla on the North-Eastern Railway.

The property consists of a small block of land, which is being devoted to the cultivation of flowers, etc. Its boundaries run in general north, south, east and westerly directions. The head of a small creek occurs in the block and the gully trends through it from the south-eastern to the north-western corner, which is the lowest part of the property.

The soil is almost entirely of a sandy nature and the block appears to be wholly occupied by sandstones. These sandstones generally resemble those of the Ross sandstone series but may belong to the sandstones of the Greta series of the Permo-Carboniferous system which occurs at other localities in the Lilydale district. The only exposure showing the strike and dip is in a small cliff in a small creek to the south-west of the block. The strike appears to be from north-east to south-west and the dip at an angle of a few degrees to the south-east.

Sandstones are amongst the most porous of rock-types and are generally found to contain supplies of underground water. The sandstones at Lalla should, therefore, yield supplies of underground water.

The best site for a bore would be towards the north-western (lowest) part of the property. The water would almost certainly be under sub-artesian conditions and would therefore have to be pumped. The same pumping plant could be used to elevate the water to the higher part of the property where storage could be arranged and a reticulation system with a fair pressure established.

Any water supplies present should be encountered within a depth of 150 feet and probably of 100 feet. As soon as a suitable supply is encountered drilling should not proceed more than 10 to 20 feet further.

It is, of course, impossible to state the quantity of water likely to be obtained. It is understood that 200 gallons per hour are desired. The majority of the bore-holes put down by the Department have yielded supplies in excess of this amount. It is a comparatively small amount and should be easily obtainable from a bore hole in sandstones such as occur at Lalla.

It is equally impossible to foretell the quality of the water. This depends upon the nature and amount of the dissolved mineral matter and varies with the rocks and districts. A water of fair quality is necessary if it is to be used for watering plants, etc. As to whether such will be obtained can only be proved as a result of the bore.

(Sgd.) P. B. NYE.
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