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Preliminary report on water prospects at Dunalley

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Mrs Crocker requested advice on groundwater prospects on a 2 ha block near Dunalley [EN 672550]. The property is situated about 4 km north of Dunalley and lies to the east of the Arthur Highway.

RELIEF AND GEOLOGY

The property is situated on a flat portion of a ridge just before the land surface drops steeply to a flat strip of land behind Boomer Bay. The property is some 60-70 m above sea level and 45-50 m above the flat along the shoreline.

The land examined is underlain by Triassic sandstone, which becomes increasingly indurated as its contact with Jurassic dolerite near the highway is approached. Where the house is situated, the sandstone on the surface appears relatively unaltered. The flat area behind the shoreline is probably underlain by Tertiary sediments.

GROUNDWATER POSSIBILITIES

Usually the Triassic sandstones are a fairly reliable source of groundwater but the property is in an elevated position suggesting that drilling to almost the level of the flat to the east (45-50 m) would probably be required. The area of sandstone between the Tertiary sediments and the dolerite may be small suggesting a fairly small storage area for groundwater. The quality of water obtained from Triassic rocks is variable and is often only suitable for stock.

CONCLUSIONS

The preliminary examination of the property suggests that owing to the elevated nature of the land, quite deep drilling would be required to test the water potential of the area. Triassic sandstone is usually a fairly reliable source of water in a more favourable topographic situation but the quality of water can be variable. It is concluded that although there is some chance of obtaining water, prospects at this stage do not appear good and drilling to test the area could be expensive because of the depth that would have to be drilled.

A survey of the geology and the groundwater resources in the Sorell-Dunalley area is being undertaken by the Department of Mines and as more information becomes available, it may be possible to give a more precise estimate of the water prospects of the area.

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