

Underground water prospects at Birchs Bay near Woodbridge, southern Tasmania.

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R.O. Miller requested an underground water survey of his 18 hectare property at Birchs Bay, about 2 km south-west of Woodbridge. The land is under pasture and orchard, and water additional to present surface supplies is required for irrigation purposes.

The property lies about 2 km to the west of D'Entrecasteaux Channel, and occupies an elevated steep hill between two valleys. Most of the area investigated is underlain by interbedded Permian sandstone and shale dipping gently to the south: the rocks commonly form small cliffs on the valley sides. A number of small, apparently perennial springs issuing from these sections have been dammed and utilised for irrigation. The extreme more elevated western boundary of the property is underlain by Jurassic dolerite, the form of which is uncertain.

HYDROLOGY

The Permian rocks in the area are considered reasonably good aquifers, and yields of 70-140 l/min can be expected from favourably placed bores. Water quality is generally fair to good (1000-3000 ppm of total dissolved solids) but may not be suitable for direct irrigation.

RECOMMENDATIONS

A bore sited on a low-lying part of the property, preferably in front of the house near the boundary fence, should yield the quantities of underground water mentioned above. Any water obtained should be analysed to determine its suitability for irrigation purposes.

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