

DEPARTMENT OF MINES - SOUTH AUSTRALIA

UNDERGROUND WATER SUPPLY AT THE CARAVAN PARK,
PORT NOARLUNGA.

Location and Requirements.

The park is situated adjacent to the Bowling Green on Whitton Bluff, Port Noarlunga and a supply of about 3,000 gallons of water per day is required for use in a proposed lavatory system to be installed in the park. The existing mains is unable to meet present demands and is therefore unlikely to be able to cope with the proposed extensions.

Topography and Geology

The park is some 100-150ft. above sea level, near to the edge of Whitton Bluff cliff. The rocks forming the cliff are clays, marls and sands of Quaternary and Tertiary age, which are probably several hundred feet thick in this area but thin northwards onto Pre Cambrian bedrock outcropping just south of Hallet Cove.

Underground Water Prospects

A number of fresh water seepages are reported to occur in the high ground near the coast. They are derived from local rainfall, which is unable to percolate downwards due to the presence of shallow impermeable clays. The water in an old well that was at one time used in the Township is probably of similar origin. A bore sunk about a quarter of a mile east of the Bluff some years ago was abandoned as the water was too salty for any purposes.

The ground water in this area is largely derived from the sea. Very little fresh water intake can be expected from the Onkaparinga River as the flow in this virtually ceases in summer and it is tidal for three or four miles upstream from the coast.

Conclusions

It is concluded firstly, that the fresh water supplies likely to be struck at shallow depths on the Caravan Park are only local seepages and will be inadequate for the requirements; Secondly, that the deeper waters likely to be derived from the bores say, 100 to 150ft. deep, even if present in sufficient quantity, would be too saline for use in the lavatory cisterns.

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