

REPORT ON UNDERGROUND WATER SUPPLY

AT MEDWAY

SORELL COUNCIL

A previous examination of the Medway area was made on 17th May and it was then reported that a limited intake area was available but to be certain of a continuous supply of water it may be necessary to sink to sea level where saturation of the sandstones could be expected.

A further examination of the area was made on 24th July on behalf of the Sorell Council. The Council Clerk was visited to ascertain the object of the scheme when it was found that the possibility of an extended building programme necessitated the search for a water supply. A larger area was therefore examined during this investigation.

It was found that the Medway Peninsula is composed of Triassic sandstones dipping to the West or West South West at angles of ten to fifteen degrees. In the vicinity of Penna, situated at the northern end of the Peninsula, and to the north and east of that township there are extensive flat areas of recent alluvium only a few feet above sea level which in part tend to become swampy.

Where a cross-section of these flats is available in a drain trending south-easterly across the flats the soils are seen to be of a clayey nature and of a thickness of at least eight feet.

The flats are bounded to the north and west by dolerite hills which must be regarded as the limit of the intake area for underground water.

To the east of Medway Peninsula the eastern arm of Pitt Water occurs and the two streams flowing into this inlet from the north are tidal for some considerable distance. It must therefore be expected that some admixture of salt water takes place in these flats.

As the sandstones dip rather steeply to the west, it is obvious that their upturned edges must underlie the waters of Pitt Water and at a shallow depth below sea level must be more or less saturated with sea water. The quantity of freshwater available will be overlying the salt water and will be the comparatively small quantity which enters the beds through the limited intake on the eastern fall of the peninsula.

A freshwater spring occurs at Medway house. The stratum from which this water issues should occur at a relatively shallow depth below the Peninsula itself but the main supply must come from a depth approaching sea level. As the intake area is small the supply of water must be limited with the possibility that sea water will result if pumping exceeds the rate at which the freshwater seeps into the bore hole.

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