

Rept. Bk. 54/164  
G.S. 2374  
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ENG. GEOLOGY SECTION



**DEPARTMENT OF MINES**  
**SOUTH AUSTRALIA**

GEOLOGICAL SURVEY  
ENGINEERING DIVISION

REPORT ON TANK SITE

OOROROO

Section 25 and 26N, Hd. Walloway

ENGINEERING AND WATER SUPPLY

by

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Senior Geologist

22nd June, 1962

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DEPARTMENT OF MINES  
SOUTH AUSTRALIA

REPORT ON TANK SITE INVESTIGATION

SECTIONS 26N & 25, HUNDRED WALLOWAY (ORROROO)

- E. & W. S. DEPARTMENT -

INTRODUCTION:

The tank site and test pits were inspected on the 17th May, 1962, in company with Mr. R. Trenery of the Engineering & Water Supply Northern District office.

LOCATION & TOPOGRAPHY:

The site is located on a north-easterly trending spur of the main range to the south of Orroroo adjacent to the existing tank. The spur is very narrow and the area available for the tank at the required level (L.W.L. 1639) is not much larger than the base of the tank.

ENGINEERING GEOLOGY:


The ridge on which the tank is to be sited is composed of blue-grey calcareous laminated slate which in its fresh condition is hard and tough. Certain beds or bands of this rock weather somewhat more easily than does the main body of the rock and the soil is deeper over these layers. All the test pits commence in shallow soil, penetrate a layer of weathered rock and bottom in relatively fresh and hard rock. The rock is quite capable of bearing the stresses likely to be imposed by a tank of the proposed size (half a million gallons) and the only doubt lies in the possibility that there may be insufficient engagement for the tank in rock at the proposed levels. However, when the excavation is almost complete an inspection should reveal whether sufficient rock is engaged on both side slopes of the spur. Any alternative

sites would pose a similar problem.

CONCLUSION:

The Orroroo tank site is underlain by hard, strong, calcareous slate and the site can be recommended for a tank of the proposed size.

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