

DEPARTMENT OF MINES.SOUTH AUSTRALIA.DISPOSAL OF EFFLUENT - COPLEY SCHOOL.

With the proposal to instal septic tanks at the Copley school arises the problem of effluent disposal. The installations will cater for the needs of approximately forty persons. The accompanying plan shows the location of the school and salient features of the area.

GEOLOGY.

The school lies approximately on the axis of a shallow synclinal fold with dips on the southern limb varying between 25° and 50° ; slates exposed along the bed of Leigh Creek have low (3° - 10°) south directed dips. A shallow cover of Recent gravels at the school and to the north and west overlies slates with dolomites.

The Copley Triassic basin of shales and sandstones with coal seams is situated nearly one mile to the south-east but the margin as indicated on the plan is approximate only.

DRAINAGE.

The Copley Hotel, $\frac{1}{2}$ mile distant west, utilizes a shallow soakage well 15 feet deep where satisfactory drainage is provided in gravels. At the school the gravel cover is expected to be possibly less than 5 feet and such is considered to be insufficient for effluent drainage.

A bore drilled in the Triassic shales and interbedded sands and coal would be expected to provide satisfactory drainage but the uncertainty of the boundary of this basin and the cost of piping effluent a distance of $\frac{1}{2}$ - 1 mile are factors which militate against this proposal.

The pre-Cambrian slates with dolomites which would be penetrated by boring at the school site would provide reasonably good drilling but experience has shown that these are generally

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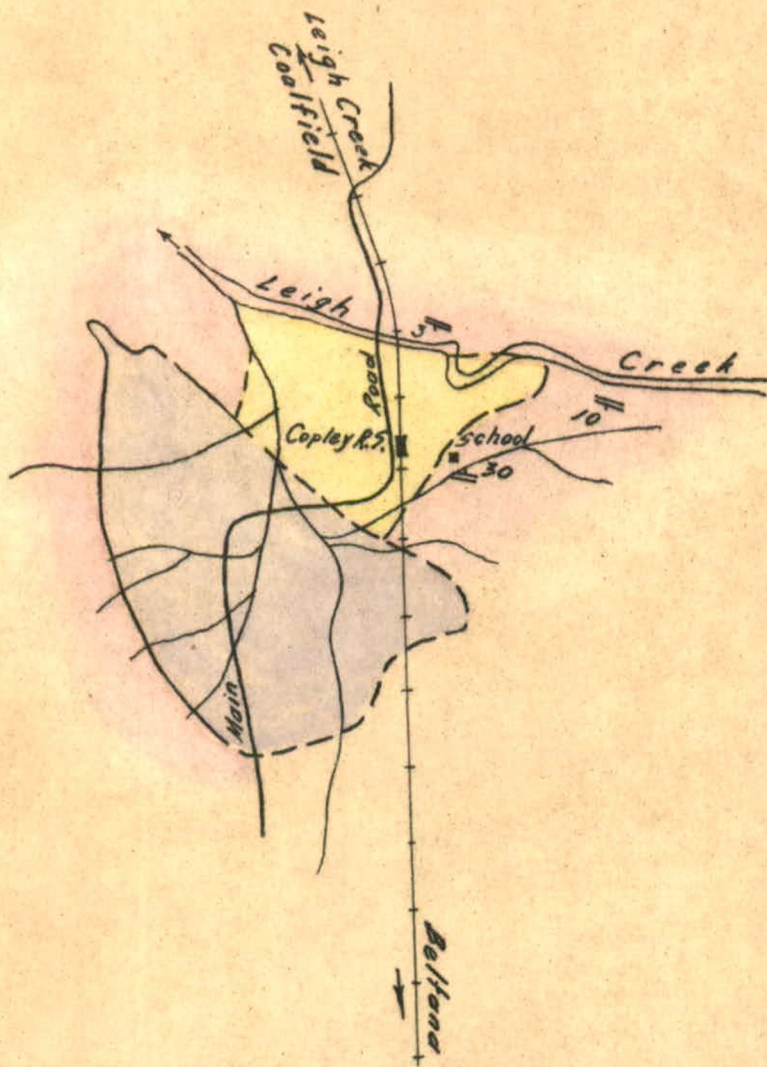
not very permeable. A bore drilled to a depth of 150 feet and left uncased might possibly effect adequate drainage, but it is emphasised that this result cannot be guaranteed. However, no alternative proposition is practicable and it is recommended that a bore be attempted.

R. K. Johns

(R. K. JOHNS)

GEOLOGIST.

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22/1/54.



SCALE
Mile 1 1/2 0 1 2 Miles

Recent Alluvium

Triassic Coal Basin

Pre-Cambrian Slates etc.

To accompany report by R. K. Johns.

S. A. DEPT. OF MINES

Approved	Passed	Drn.	COPLEY SCHOOL DISPOSAL OF EFFLUENT	D.M. ²⁵⁸⁸ / ₅₃	Scale 1 Mile to 1 inch
		Tcd. M.B.L.		Req.	5857
		Ckd. R.R.			
Director	C.D.	Exd.			Date 25-1-54 C.C.