TDH:3

25th March, 1952.

## MEMORANDUM:

## UNDERGROUND WATER ON THE PROPERTY OF F. CAMERON, CHUDLEIGH

This property is situated some two miles south of Chudleigh, on either side of the Caveside Road. To the west of the road are large alluvial flats formed in the valley of Lobster Creek by the removal of the easily eroded limestones.

Wells, yielding small amounts of water, are sunk to shallow depths in the alluvium.

To the east of the road, where Mr. Cameron desires to obtain further supplies, are hills of Gordon River Limestone topped by basalt. Between the limestone and the basalt are narrow Tertiary pebble beds. Small springs seep out of the hill-side at the position of these pebble beds below the basalt. A small/intrusion of dolerite occurs in the property.

It is in the limestone beds that water must be sought. Now limestones very enormously in respect to their yield of underground water. Older limestones are usually compact and impervious in themselves but a great deal of water is contained in joints and along bedding planes and underground streams are frequent in limestone country. The location of bores should therefore be where surface hollows show the likelihood of breaks and cavities in the limestone. To my knowledge, no boring for water has been done in the Gordon River Limestones.

Sites for at least two bores were discussed with Mr. Cameron and I informed him that there was a reasonable chance of striking water in these limestone beds.

(Sgd.) Terence D. Hughes.

GEOLOGIST.

The Director of Mines, HOBART. Tasmania.