

TDH:1

16th September, 1949.

MEMORANDUM:

Underground Water on Property of
Mr. W.J. Hamilton, Talune Street,
Lindisfarne.

Mr. Hamilton and certain of his neighbours are anxious to locate some source of underground water for use on their gardens.

Talune Street runs along the edge of a small Tertiary flat at the base of Natone Hill. This hill is composed of Permian mudstones, a rock which will not absorb any quantity of water. Along the foreshore on the other side of this small flat (it is about 15 chains in width) are outcrops of basalt.

Now if the basalt does not extend right up to the mudstone at or near surface level, that is, if there is any depth of Tertiary sediments bordering the mudstone, then there is a good chance of limited supplies of water being available in these sediments. This depends, however, on the depth of the sediments and their composition. They must extend in depth below the level of the basalt and there must not be large beds of clay included in them. If these two conditions are satisfied, then some of the water which runs off Natone Hill will be absorbed by the sediments and held back from entering the Derwent River by the basalt bar.

I have acquainted Mr. Hamilton with these facts and advised him to sink a small well in his garden so that further details may be obtained.

T.D. Hughes.
GEOLOGIST.

The Director of Mines.