

LIMESTONE AT HAMPSHIRE

Although recent geological maps of the Hampshire District, and of Tasmania generally, show large limestone deposits there, and one creek in the district is named Limestone Creek, these areas are grossly exaggerated. That is not to say that limestone does not occur in the Hampshire District; it does, in narrow beds averaging a foot or less in thickness contained in very siliceous sediments.

The main outcrops are in the vicinity of a granite intrusion and show a fairly wide area of contact metamorphism. The most common rock type is a chert or hornfels containing bands of limestone and calc-silicate bands composed mainly of the metamorphic mineral wollastonite.

Over much of the area limestone is not apparent, but an outcrop on the eastern bank of Limestone Creek, 60 chains south of the Natone Road bridge shows a thinly bedded series of rocks in which may be seen five bands of limestone varying in thickness from 3 inches to 3 feet, contained in beds of hornfels and calc-silicate rock. These beds strike at 160° and dip to the south west at 15° . The thickness of the outcrop exposed is 25 ft. An analysis of the limestone taken from the various bands showed :-

Acid Insoluble	8.4%
CaO	51.0
MgO	0.4
Ignition Loss	38.0
Fe ₂ O ₃ Al ₂ O ₃ TiO ₂	1.6

The siliceous portion of the outcrop showed :-

Acid Insoluble	68.0%
CaO	21.6
MgO	0.6
Ignition Loss	2.6
Fe ₂ O ₃ Al ₂ O ₃ TiO ₂	6.7

This second analysis is of a representative sample taken across the silicate and calc-silicate beds and shows that the minerals are in the following proportions :-

Calcium Carbonate (CaCO ₃)	6%
Wollastonite (CaSiO ₃)	38
Silica (SiO ₂)	48

This does not mean that the minerals are in that proportion in each bed as some are wholly siliceous and others chiefly composed of wollastonite.

Thus while limestone does occur at Hampshire and is of good commercial grade, its limited extent and narrow width make it an object of geological interest rather than an economic proposition.

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