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Report on Six Samples of Limestone from Localities in Flinders Island, Tasmania

by

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DEPARTMENT OF SUPPLY & SHIPPING.

Mineral Resources Survey Branch.

REPORT ON SIX SAMPLES OF LIMESTONE FROM LOCALITIES IN FLINDERS ISLAND, TASMANIA.

Report No.1945/71.

7C3 - Pratt's River near Palana, at road corner on N. Boundary of A.R. Cooper's purchase 7/12.

Fawnish calcareous sandstone, with poorly preserved foraminifera and fragments of bryozoa and molluscan shells indeterminate.

11C2 - Emita, beside road on N. Boundary of A. King's purchase 7/2.

Dark buff coloured limestone with algal remains (Lithothamnium), poorly preserved foraminifera including Globigerina bulloides, Streblus sp., Discorbis dimidiata, echinoid spines, holothurian remains, fragments of bryozoa and mollusca indeterminate, and numerous fine angular quartz grains in a calcareous matrix.

12C1 - Beside Whitemark-Lady Barron Road, on N. Boundary of W.J. Martin's purchase 8/3.

Buff coloured limestone, with some angular quartz grains, small foraminifera including cf. Rectobolivina, Anomalina sp., Streblus beccarii, Discorbis dimidiata, echinoid spines, holothurian remains, and fragments of bryozoa and mollusca shells indeterminate.

12C2 - Locality as 12C1.

Cream to buff coloured, extremely fine-grained limestone, cherty in appearance, and with organic remains almost completely replaced by calcite.

12C6 - Pat River near Whitemark, in N.E. part of C.D. Harley's purchase 303/2/21.

Buff coloured limestone with quartz grains, foraminifera including Textularia sp., and Streblus beccarii, echinoid spines and fragments of molluscan shells.

12C10 - Near Whitemark School, one chain S. of corner of road on N. Boundary of E.M. Robinson's purchase 100/0/16.

Buff coloured limestone with quartz grains, a few foraminifera including Quinqueloculina sp., rotaline indeterminate and Elphidium crispum, echinoid spines and fragments of molluscan shells.

Notes on the Samples.

The six samples of limestones from Flinders Island, Tasmania, described above are from Upper Pliocene to Pleistocene in age.

Samples 7C3, 11C2, 12C1, 12C6 and 12C10 contain an assemblage of organisms which are characteristic of Recent shoreline deposits such as are found in latitudes south of Sydney, along the east and southeast coasts of the Australian mainland, and

the north and east coasts of Tasmania. Deposition took place in water less than 50 fathoms and under temperate climatic conditions.

The organisms are poorly preserved in the limestones. The only determinants of age are the few foraminiferal species which could be recognised. These include the Recent Species Globigerina bulloides, d'Orb. Streblus beccarii (d'Orb.), Discorbis dimidiata (P.& J.) and Elphidium crispum (Linne). These forms are common in Recent shore sands in latitudes south of Sydney and in deposits of Pliocene and Pleistocene ages which have been formed under similar conditions. S. beccarii flourishes in water less than 50 fathoms in depth, and D. dimidiata in less than 35 fathoms. E. crispum is abundant in shallow water but is less common in water down to 350 fathoms. G. bulloides is a widely distributed pelagic species.

Other organisms present are too fragmentary for even generic determination. The presence of echinoid spines and holothurian remains indicate shallow water conditions of sedimentation.

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Canberra.
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