ABSTRACT

The Dry Harbour Mountains area is a large karstified limestone plateau which lies between 2000 and 2500 feet above sea level. The limestones range in age from Middle Eocene to Upper Oligocene, and rest conformably on marly and chalky limestones the ages of which probably extend into the Lower Eocene.

The northern boundary of the Dry Harbour Mountains is defined by the E.-W. trending Duanvale Fault system which separates the northerly deeper water North Coast Zone from the shallow water Clarendon Block to the south.

The recrystallized and partly dolomitized basal Troy Member of the White Limestone Group, is shown to represent metamorphosed aspects of the Clarendon Member, and the Swanswick and Somerset Formations. These Limestones are Mid-Eocene in age.

An Upper Eocene to Lower Oligocene age for the lower Walderston Formation is indicated by the following faunal assemblages; Dictyoconus cookei, Pseudochrysalidina floridana and Lepidocyclina chaperi below strata containing D. cookei, Archaias angulatus and Peneroplis sp.

There is no definitive Mid-Oligocene fauna and the Brown's Town Formation which contains an Upper Oligocene, Eulepidina-Heterostegina, assemblage is considered to have a disconformable base.

Praerhapydionina delicata and Peneroplis cf. glynnjonesi are recognized for the first time as important elements of the Jamaican Upper Oligocene.

The regional dolomitization found in the White Limestone is considered to be closely related to the abundance of magnesium bearing

algae and algal clasts, restricted circulation of magnesium charged ground water due to barrier conditions such as the presence of the impermeable Yellow Limestone Group, and on a small scale the effect of faulting.