ROSCOMMON - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Keeloges Quarry

Other names used for site

IGH THEME IGH8 Lower Carboniferous

TOWNLAND(S) Carrickmore, Keeloges, Rathdiveen

NEAREST TOWN Boyle

SIX INCH MAP NUMBER 6
NATIONAL GRID REFERENCE 183230 3

NATIONAL GRID REFERENCE 183230 301500 (centre of quarry) 1:50,000 O.S. SHEET NUMBER 33 1/2 inch Sheet No. 7

Outline Site Description

A large, working limestone quarry, about 3km east of Boyle town.

Geological System/Age and Primary Rock Type

The quarry exposes bedrock of the Oakport Limestone Formation and the Ballymore Limestone Formation, both of Carboniferous age, which dates from about 330 million years ago.

Main Geological or Geomorphological Interest

This quarry provides superb representation and exposure of rock strata that are otherwise rarely exposed at surface and are often described and understood by geologists only from continuous borehole records drilled down into the bedrock. The limestones at Keeloges are very flat bedded. They are fossiliferous with many different types of fossils such as corals, crinoids, trace fossils and microfossils.

The two limestone formations are divided by a palaeokarstic surface in the quarry where the lower one was briefly exposed and slightly weathered before the overlying limestone was deposited on top of it. The horizontal beds show that this was a short-lived episode. There are features in the quarry showing karstification that has occurred mostly since the Ice Age, where water has dissolved the rock and left narrow voids as fissures, pipes and small caves, as well as at least one solution doline. Here an enclosed depression has been filled with sand and mud, coloured orange by iron minerals.

Site Importance – County Geological Site; may be recommended for Geological NHA This is an important representative section of rock in the region and is likely to be viewed as having the required national interest for a geological NHA under the IGH8 Lower Carboniferous theme when further work is completed on that theme.

Management/promotion issues

As a working quarry, the listing as a County Geological Site has no implications for the normal operation of the quarry, subject to standard permissions and conditions under planning and environmental legislation. It would be desirable to consider retaining representative faces for geological purposes during any final closure stages. It is not suitable for any general promotion other than by express agreement and permission of the owners and operators, Roadstone Wood.



An overview of the south western end of the quarry, looking northeast.



A cross section through an enclosed depression or doline filled with unwanted sediment for the quarry operators (left). A small cave exposed in the quarry face (right).



A bench that has been drilled ready to place explosives in the pattern of holes to blast the rock apart in a highly controlled operation.





