# **WICKLOW - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Kilmacurra Quarry

Other names used for site

IGH THEME IGH11 Igneous Intrusions

TOWNLAND(S) Kilmacurra West

NEAREST TOWN/VILLAGE Rathdrum

SIX INCH MAP NUMBER 30

NATIONAL GRID REFERENCE 724682E 688471N (centre of quarry)

1:50,000 O.S. SHEET NUMBER 62 GSI Bedrock 1:100,000 Sheet No. 16

#### **Outline Site Description**

Kilmacurra Quarry is a large, partly flooded quarry developed in a diorite intrusion. It is now abandoned.

## Geological System/Age and Primary Rock Type

The bedrock is diorite, part of the Caledonian Carrigmore Diorite suite of intrusions in east Wicklow. The suite has been dated at 410 Ma, slightly older than the Leinster Granite. Wallrocks are slates of the Ordovician Kilmacrea Formation.

### Main Geological or Geomorphological Interest

The Carrigmore Diorite suite comprises a series of igneous intrusions of intermediate composition, i.e. a chemical and mineralogical composition intermediate between granite and gabbro. Diorite intrusions occur widely in Ireland but the Carrigmore suite is unusual for the size and internal complexity of the intrusions. Diorite is a relatively hard rock, suitable for aggregate and concrete manufacture, and several quarries have been developed in the Carrigmore suite, including those at nearby Ballinclare and Parnell Quarry near Rathdrum.

### Site Importance - County Geological Site

Diorite is an important minor igneous rock type in Wicklow. The Kilmacurra Quarry provides good exposure on quarry faces and in loose blocks. The other quarries developed in the Carrigmore suite are apparently still operational so this site provides an opportunity to examine the diorite in situ.

#### Management/promotion issues

The quarry is abandoned and partly flooded, with deep water and high vertical quarry faces. It is of interest mainly to geologists and is not suitable for promotion to the general public.



View southwards of western side of quarry, showing vertical faces and flooded quarry floor. Upper faces to right are readily accessible.



Medium-grained grey-green diorite, typical of rock exposed in the quarry.

