

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Cappagh Quarry |
| Other names used for site | |
| IGH THEME | IGH1 Karst; IGH8 Lower Carboniferous |
| TOWNLAND(S) | Kilgreany |
| NEAREST TOWN | Dungarvan |
| SIX INCH MAP NUMBER | Waterford 30 |
| NATIONAL GRID REFERENCE | 217600 94900 |
| 1:50,000 O.S. SHEET NUMBER | 82 1/2 inch Sheet No. 22 |

Outline Site Description

A large working quarry, extracting limestone for aggregate and making concrete blocks.

Geological System/Age and Primary Rock Type

The quarry is excavated in Carboniferous Limestone of the Waulsortian Formation. There are karstic features in the quarry walls which may be of Holocene (post-glacial) age or they may have begun forming during the Quaternary Period (Ice Age).

Main Geological or Geomorphological Interest

The quarry is one of the best places to see Waulsortian rocks in County Waterford, and the rocks here are typical of the entire valley from Dungarvan Harbour eastwards to Lismore and beyond. The rocks are in the core of a geological structure called a syncline which is a downfold of the strata. Hence some of the quarry walls show vertical bedded rocks, although most of the limestone is quite massive, typical of the Waulsortian limestone.

Additional features of interest here are the extensive expressions of karstified limestone. There are solution pipes, sand filled dolines (enclosed depressions), epikarst and expanded joints with brown deposits of the mineral calcite on them. There was a minor cave in the south west corner of the quarry but it is now inaccessible due to the construction of a settling pond adjacent to the face.

Site Importance

The quarry is worth recording as a County Geological Site since it provides a significant window into the underlying geology of the Dungarvan valley, whose rocks are largely only seen otherwise at the coast and in caves.

Management/promotion issues

As an active quarry, the CGS status has no impact or restriction on the normal permitted operation of the quarry. Unless the operators (John A. Wood) have additional land banks adjoining the existing footprint, it would appear that the quarry is close to the limits of the rock reserve, without working below the water table. There may be opportunities for active engagement with the operators to preserve some interesting quarry faces, such as the heavily karstified eastern side, depending on planned end-use or restoration plans. Further information on possibilities is explored in the GSI and Irish Concrete Federation publication of *Geological Heritage Guidelines for the Extractive Industry* by Sarah Gatley and Matthew Parkes.



View of sand filled doline (enclosed depression) in eastern wall of Cappagh Quarry.



Near-vertical bedding in the Waulsortian limestone of western face of Cappagh Quarry.



View of karstified limestone at northern face of quarry, showing epikarst – expanded joints and fractures in top few meters of limestone bedrock.



