

LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Eyon Cross Quarry
Other names used for site	Tobin's Quarry
IGH THEME	IGH8 Lower Carboniferous
TOWNLAND(S)	Eyon
NEAREST TOWN/VILLAGE	Cappamore
SIX INCH MAP NUMBER	15
ITM CO-ORDINATES	573630E 650535N (centre of quarry area)
1:50,000 O.S. SHEET NUMBER 65	GSI BEDROCK 1:100,000 SHEET NO. 18
GIS CODE LK011	

Outline Site Description

This site comprises a long, narrow, working quarry cut deep into the limestones of eastern Limerick.

Geological System/Age and Primary Rock Type

The bedrock at the site is of Mississippian (Lower Carboniferous) Waulsortian limestones, but the southern end of the quarry area also intersects the overlying pale, cherty, crinoidal limestone of the Lough Gur Formation.

Main Geological or Geomorphological Interest

The Waulsortian limestone rocks are typically fossiliferous, pale grey, massive, unbedded wackestones, deposited below storm wave base in water more than 200m deep. They often display little structure, and the contact between the more massive Waulsortian reef units and the overlying cross bedded limestone of the Lough Gur Formation is seen in three dimensions at Eyon Cross, as the quarry faces are deep on three sides.

Parts of the quarry seem to have well developed elements of karst – deep, almost vertical, enlarged fractures from dissolution of the limestone. Evidence of karstic cavities is also present at depth in the quarry, and some of these are clay-filled. Folded beds can be seen in the western face of the quarry.

This site has hosted a quarry since the late nineteenth century, as can be seen from the original site inch maps of the locality.

The quarry has produced stone for aggregates, chippings, railway ballast, lime dust, screenings, and drainage stone. Limestones of the Waulsortian Limestone are worked for aggregate in several quarries in the region.

Site Importance – County Geological Site

This County Geological Site is an important representative site exhibiting fresh and extensive exposures of Waulsortian Limestones, as well as the overlying Lough Gur Formation limestones.

Management/promotion issues

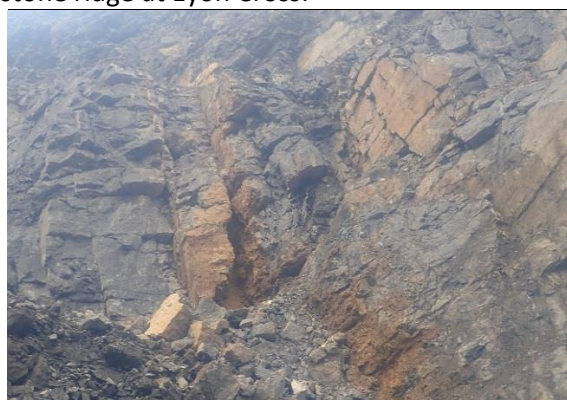
As a working quarry, the listing as a County Geological Site has no implications for the normal operation of the quarry, subject to standard permissions and conditions under planning and environmental legislation. In the event of any future changes in quarrying operations, it would be desirable to consider retaining representative faces for geological purposes. Given the active nature of the quarry, the site is not suitable for any general promotion.



The deep quarry into the limestone ridge at Eyon Cross.



Ripple cross bedding in limestone at the southern end of the quarry.



Deep, clay-filled karstic cavity in the eastern face.



Cross bedded limestones of the Lough Gur Formation overlying Waulsortian limestones in the western face of the quarry.

