

## LIMERICK - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Mungret Quarry</b>
Other names used for site	Castlemungret Quarry, Limerick Cement Works, Irish Cement
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous, IGH15 Economic Geology</b>
<b>TOWNLAND(S)</b>	<b>Tervoe, Conigar, Castlemungret Quarry</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Mungret</b>
<b>SIX INCH MAP NUMBER</b>	<b>4, 5, 12, 13</b>
<b>ITM CO-ORDINATES</b>	<b>553000E 655000N (centre of quarry area)</b>
<b>1:50,000 O.S. SHEET NUMBER 65</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 17</b>
<b>GIS CODE LK026</b>	

### Outline Site Description

This site is a complex of extensive branching network of pit offshoots, in a large, active quarry, which produces limestone for cement manufacture.

### Geological System/Age and Primary Rock Type

The bedrock at the site is of Mississippian (Lower Carboniferous) limestone.

### Main Geological or Geomorphological Interest

Within the faces of Mungret Quarry, dark grey, argillaceous, mud-supported limestones pass up into fairly well sorted, fine to medium grained, peloidal-skeletal, grain-supported limestones. These again pass up into oolitic and crinoidal grain-supported limestones.

With easy access to limestone, clay and shale, Limerick is an ideal location for cement manufacture. As far back as 1904, the Limerick Harbour Authority prepared a detailed report indicating the potential for cement production at Castlemungret. Mungret Quarry itself dates back to the late 1930s and the first deliveries of cement from the original small single wet process kiln took place in 1938.

By the early 1950s, the rising demand for cement called for expansion and the years that followed saw an almost continuous series of projects, which by 1965 had increased annual capacity to 725,000 tonnes of cement, from 5 wet process kilns. Following this, it was not until 1980 that forecasts of further growth in construction activity indicated the need for additional development at Mungret Quarry. A modern dry process kiln (Kiln 6) with a capacity of close to 800,000 tonnes was completed in 1983. The introduction of the newer dry process at Limerick provided benefits in terms of fuel efficiency over the older wet process kilns which it replaced.

### Site Importance – County Geological Site

This site is a very extensive, well-preserved quarry, with clean faces that are ideal for study. As the limestone in the locality is as yet not mapped to Formation level, such detailed study is also warranted. Mungret Quarry is one of the largest quarries in the country, and given its long history and importance to the region economically, it is recommended for designation as a County Geological Site.

### 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.





Aerial view of Mungret Quarry, viewed from the northwest.



The northwestern extreme of the quarry area.



Cross bedded, oolitic limestones at the north of the quarry area.



The northeastern extreme of the quarry.



