

DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Mountcharles Sandstone Mine
IGH THEME	IGH15 Economic Geology, IGH8 Lower Carboniferous
TOWNLAND(S)	Drumkeelan
NEAREST TOWN/VILLAGE	Mountcharles
SIX INCH MAP NUMBERS	93
ITM CO-ORDINATES	586008E, 879223N
1:50,000 O.S. SHEET NUMBER: 11	GSi BEDROCK 1:100,000 SHEET NOS. 3, 4
GIS Code DL029	

Outline Site Description

Two adit entrances are preserved along a quarry track beside a minor road in Drumkeelan. This large quarry is currently worked from sandstone horizons that extend, still intact, above the adits.

Geological System/Age and Primary Rock Type

The Mountcharles sandstones are Lower Carboniferous in age and form part of the Mullaghmore Sandstone Formation. The primary rock type worked from these adits in historic times was a top quality grey–buff coloured dimension stone.

Main Geological or Geomorphological Interest

This site is of prime geological and historical interest because stone has been worked here for architectural and ornamental purposes since at least the 12th century, when Cistercian Monks used it in the construction of Asseroe Abbey. Most dimension stone is quarried by open cast methods but here the particular sandstone horizon(s) sought, totalling about 2 m in thickness, was mined underground. The mine adits run in a thick horizontal bed for an unknown but apparently extensive distance. The mined sandstone horizon has a fine grain and firm intergranular cement that allowed craftsmen to achieve great detail in tombstones and architraves. A single stonemason's shed has been preserved on the roadside opposite. In former times there were many such sheds in the neighbourhood.

This site is also important for the excellent inland exposure of the deltaic sandstones of the Lower Carboniferous Mullaghmore Sandstone Formation, more typically exposed in County Donegal along the coast north of Bundoran.

Several other sandstone quarries are present in the area. The largest is the upper Drumkeelan quarry, just one kilometre to the northeast where modern quarrying operations led to the collapse of at least some adit entrances in recent times.

Site Importance: County Geological Site; may be recommended for Geological NHA

The site is important in the fields of economic geology and industrial archaeology, representing one of the earliest relics of concerted industrial effort in Donegal. It is also important for establishing the provenance of stonework in early ecclesiastical buildings and other artefacts in northwest Ireland and elsewhere, should future remedial work be required on these historical buildings.

Management/promotion issues

The current owner is aware of the quarry's historical significance as his family has worked stone here for many generations, but as the site is part of an active quarry operation, any visits carry the risk of public safety issues. For this reason, further promotion should only be considered by agreement with the owner. The adits on the site have undoubted scientific and historical mining interest and their preservation should be encouraged by engagement with the owner and acknowledgement of the site's continued importance.



Well-preserved adit entrances at Mountcharles sandstone mine.



Stonemason's shed.

