

## MAYO - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Lough Akeel</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Ballinvilla</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Castlebar</b>
<b>SIX INCH MAP NUMBER</b>	<b>69</b>
<b>ITM CO-ORDINATES</b>	<b>516590E 792830N</b>
<b>1:50,000 O.S. SHEET NO. 31</b>	<b>GSI BEDROCK 1:100,000 SHEET NOS. 6, 11</b>
<b>GIS Code MO076</b>	

### **Outline Site Description**

This site comprises a disused quarry.

### **Geological System/Age and Primary Rock Type**

Lower Carboniferous age (359 – 324 million years ago) oolitic limestone and conglomerate rocks of the Lough Akeel Formation. The formation consists of sandy, cross-bedded, fine-grained oolitic limestone.

### **Main Geological or Geomorphological Interest**

The rocks of the Lough Akeel Formation represent shallow marine Carboniferous rocks. The base of the formation is gradational, as underlying sandstone coarsens upwards into pebbly limestone. The quarry exposes c. 18m of beds in the lower section of the formation. This lower section includes 3 pebble beds <0.7m thick, which exhibit abundant angular to sub-angular and sub-rounded quartz pebbles that measure <4cm in width. Cross bedding in some of the oolites is outlined by thin layers (laminations) of sand and grit. The cores of the oolites are commonly quartz and feldspar. Chert is also present. The quarry area is c. 180m long (SW-NE) and ~50m wide.

### **Site Importance – County Geological Site, may be recommended for Geological NHA**

This County Geological Site is important as it is the type locality for the Lough Akeel Formation. Due to the landscape where the Lough Akeel Formation occurs, this is the only well exposed and easily accessible locality for the Lough Akeel Formation. It is situated in a scenically beautiful area to the northeast of Castlebar.

### **Management/promotion issues**

The quarry is occasionally used as a temporary compound for road/water works. Currently the quarry faces are only accessible in parts. There is a significant amount of large boulder debris at the foot of the quarry face and the quarry face appears quite unstable in places. As with all quarries (active and disused), visitor and public safety is a major concern. In its present state, the site is not suitable for public promotion, though it is an important teaching and research location. Dumping remains a major threat to this open and sheltered site.



Cross-bedded sandy limestones in quarry face.



Cross-bedded pebble/conglomerate horizon.



View of north part of quarry, looking southwest.



Entrance to quarry.



View of north part of quarry, looking north.



