

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Glenflesk
Other names used for site	
IGH THEME	IGH10 Devonian
TOWNLAND(S)	Beenmore, Drominaharee, Killeen, Garries, Foiladuane, Dereenacullig
NEAREST TOWN/VILLAGE	Glenflesk
SIX INCH MAP NUMBER	76
ITM CO-ORDINATES	511000E 582500N
1:50,000 O.S. SHEET NUMBER	79
GSi BEDROCK 1:100,000 SHEET NO.	21
GIS CODE	KY049

Outline Site Description

Hummocky and hilly terrain bounding the Glenflesk River valley along the N22 Killarney-Macroom road.

Geological System/Age and Primary Rock Type

The bedrock comprises Upper Devonian Old Red Sandstone of the Glenflesk Chloritic Sandstone Formation. Radiometric dating of volcanic units within the Glenflesk Chloritic Sandstone Formation yielded ages between 385 and 378 million years old (specifically mid-Frasnian to early Givetian).

Main Geological or Geomorphological Interest

The Glenflesk Chloritic Sandstone Formation is a major rock unit in south Kerry and extends from Sneem on the south side of the Iveragh Peninsula eastwards to Millstreet in County Cork. Much of the mountainous terrain along this region is underlain by Glenflesk Chloritic Sandstone Formation. Its stratigraphic thickness is understood to be in excess of 3,800 m. The formation comprises predominantly green, medium to coarse-grained sandstone with some siltstone and pebbly sandstone. The green colour reflects the presence of chlorite, a green-coloured silicate mineral, within the sediments. The formation is interpreted as representing sediment deposited from large, braided rivers in feeder channels of a terminal fan system. Terminal fans occur where sediment-laden rivers decrease in size and ultimately vanish as a result of evaporation and transmission losses. They tend to form in arid or semi-arid regions that are characterized by a moisture deficit. Radiometric (Pb-Pb zircon) dating of volcanic units within the Glenflesk Chloritic Sandstone Formation has yielded ages of 384 to 378 million years old (specifically mid-Frasnian to early Givetian). The Glenflesk Chloritic Sandstone Formation contains units of volcanic rhyolite and volcanoclastic rocks, collectively known as the Lough Guitane Volcanic Complex. These volcanic rocks provide evidence of a rare episode of volcanic activity that occurred in southwest Ireland during Upper Devonian times.

Site Importance – County Geological Site

This is an important County Geological Site. The sandstones and bedding characteristics within the formation are exceptional examples of products of a large, braided river system.

Management/promotion issues

The chloritic sandstones are best observed at roadside sites near Glenflesk village, and at Dereenacullig (R569, Loo River Valley). The site is suitable for research groups and natural heritage interest groups. Information relating to the depositional environment during the Upper Devonian in this part of Kerry would be a valuable inclusion in any published promotion literature, or information-panel signage erected in the locality. Much of the site is within Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC and pNHA (site Code 000365).



Glenflesk Chloritic Sandstone Formation on west side of N22 road at Drominaharee.



South dipping Glenflesk Chloritic Sandstone Formation beds on cliffs at Foiladuane, on west side of Glenflesk Valley. View from L11205 road in Inch townland.



Detail of Glenflesk Chloritic Sandstone Formation, Dereenacullig, Loo River Valley.

