

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Claggan Quarry
Other names used for site	
IGH THEME	IGH6 Mineralogy
TOWNLAND(S)	An Cloigeann (Claggan)
NEAREST TOWN/VILLAGE	Maam Village
SIX INCH MAP NUMBER	39
ITM CO-ORDINATES	501070E 750670N (quarry)
1:50,000 O.S. SHEET NO. 38	GSI BEDROCK 1:100,000 SHEET NOS. 10, 11

Outline Site Description

A roadside quarry at the southeastern end of the Maam Valley, overlooking Lough Corrib.

Geological System/Age and Primary Rock Type

Green-grey psammites and semi-pelites with numerous quartz-muscovite-andalusite veins cross-cutting the bedrock in the quarry. Bedrock is Ballynakill Schist Formation, of Neoproterozoic age, and is part of the Dalradian Argyll Group.

Main Geological or Geomorphological Interest

This site comprises two disused roadside quarries (east and west). The quarries were operated to provide road metal and fill for local use. Both were worked intermittently by the county council. The west quarry remains accessible and has a wide lay-by/parking area. A 15cm vein of massive crystalline pyrite was noted in the east quarry (GSI Minerals Inventory Site Report, January 1985).

Rb-Sr isotopic data from coarse muscovite samples from quartz-andalusite pegmatite at Claggan Quarry have yielded ages of 450 Ma to 459 Ma. The dates are indicative of metamorphism (syn- to late-D3 event in Connemara) occurring at this time. These ages are similar to samples gathered at Knockanbaun, further northwest along the Maam Valley, and from the same stratigraphic unit.

A band of staurolite-biotite schist with coarse centimetre sized cordierite poikiloblasts in a biotite/muscovite-rich matrix also occurs at Claggan. The mineral assemblages and textures at Claggan, and other associated locations in Connemara, serve to assist in the understanding of the regional metamorphism of the Connemara Dalradian rocks, which is linked to magmatism in the southern part of the region.

Site Importance – County Geological Site

This is an important county geological site in terms of understanding and observing characteristic aspects of regional metamorphic zoning in the Connemara Dalradian region, and in particular in providing age constraints on the metamorphic events in the Connemara Dalradian.

Management/promotion issues

The foot of the quarry wall is overgrown with alder, gorse and bramble, making access to the exposures increasingly challenging. The disused quarry face exposures are weathering, and losing the 'fresh' exposure value that made this an important teaching and research field site. The site is not under any immediate threat except from vegetation overgrowth. The quarry floor/lay-by is occasionally used to store aggregates, which keeps the lay-by area clear of vegetation.



Claggan Quarry on north side of the R345 Corr na Móna to Maam Village road, viewed looking west.



Quartz veins outcropping in quarry face. View of Leckavrea Mountain to the west.



Andalusite, quartz and muscovite veins exposed in quarry face.



Large (4cm) andalusite crystals (purple-grey) in quartz veins.

