

LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Knockderc Quarry
Other names used for site	
IGH THEME	IGH11 Igneous Intrusions
TOWNLAND(S)	Patrickswell
NEAREST TOWN/VILLAGE	Patrickswell
SIX INCH MAP NUMBER	32
ITM CO-ORDINATES	565370E 638090N (centre of quarry)
1:50,000 O.S. SHEET NUMBER 65	GSI BEDROCK 1:100,000 SHEET NO. 18
GIS CODE LK020	

Outline Site Description

Large abandoned quarry

Geological System/Age and Primary Rock Type

Mississippian (Lower Carboniferous) syenite.

Main Geological or Geomorphological Interest

The Knockderc Quarry was excavated in an intrusion of syenite, a plutonic rock intermediate in composition between gabbro and granite. Although one other syenite intrusion has been mapped in Limerick, at Maddyboy, syenite is an uncommon rock type in Ireland. The Knockderc syenite is mapped as a near-circular intrusion, cutting across the contact between the Ballysteen Formation and the Ballynash Member of the same formation.

The syenite is a porphyritic rock, with white feldspar crystals in a pink groundmass. The quarry walls are cut by both vertical and near-flat-lying joints. The quarry is extensive, with large faces approximately 30m high. The floor of the quarry is substantially cleared and there is ready access to the faces.

Site Importance – County Geological Site

This site is a well-preserved quarry with clean faces that are ideal for study. It is the best exposure of syenite in Limerick and possibly in Ireland. It is recommended for designation as a County Geological Site.

Management/promotion issues

The quarry is on private land. Paths that run around it appear to be popular with walkers. The site is included within Glen Bog SAC (001430), a wet woodland on the site of a former lake. As such it is unlikely to face any development threat. As it is likely to be of interest mainly to geologists and researchers it does not require further promotion.



Knockderc Quarry, view to north from quarry entrance



Pink syenite, with white feldspar phenocrysts



Close-up of quarry face showing jointing.



Exterior of quarry, beside road, showing original hillside and remaining quarry infrastructure

