LEITRIM - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Finnal aghta Quarry

Other names used for site

IGH THEME IGH4 Lower Palaeozoic

TOWNLAND(S) Finnalaghta
NEAREST TOWN/VILLAGE Mohill
SIX INCH MAP NUMBER 35

ITM CO-ORDINATES 603900E 794000N

1:50,000 O.S. SHEET NUMBER 33 GSI BEDROCK 1:100,000 SHEET NO. 12

GIS CODE LM011

Outline Site Description

Abandoned quarry in area of pasture.

Geological System/Age and Primary Rock Type

Greywackes of the Ordovician (Lower Palaeozoic) Finnalaghta Formation (c. 500 Ma).

Main Geological or Geomorphological Interest

Finnalaghta Quarry is notable for two particular reasons. Firstly, it comprises the type section for the Finnalaghta Formation, part of the Northern Belt of the Longford-Down inlier, and secondly it contains the type example of an unusual structural feature, termed a transected monocline. The Finnalaghta Formation comprises fine-medium-grained greywackes with minor intercalated shale horizons, deposited as turbidites. These are well exposed in the remaining quarry faces, particularly on the more accessible western side. The transected monocline comprises a monoclinal fold or flexure that is cut by the regional cleavage such that bedding is right-way up on both long limbs of the monocline but inverted on the intervening short limb.

The mapping upon which these type sections and examples are based was carried out in the 1970s when the site was an abandoned, former council quarry. Subsequently it was brought back into operation under private ownership, and further quarrying took place. The transected monocline was reported from the eastern quarry wall but this face is now inaccessible owing to a deep flooded excavation. Apparent flexuring of the bedding can be discerned at a distance but the presence of the transected monocline could not be verified during the audit.

Site Importance – County Geological Site

The site is the only one in Leitrim with a representative section of a geological unit from the Lower Palaeozoic Longford-Down inlier and as such is of local importance. The recorded occurrence of a transected monocline is also geologically significant.

Management/promotion issues

Although a former council quarry, this site is now privately owned and access is only with the owner's permission. At the time of the audit, the site was in use mainly for storage of agricultural material and quarrying has not taken place in recent years. The site is not within any protected area. It is likely to be of interest only to researchers and promotion is not warranted.



General view to south of eastern side of quarry floor showing flooded excavation.



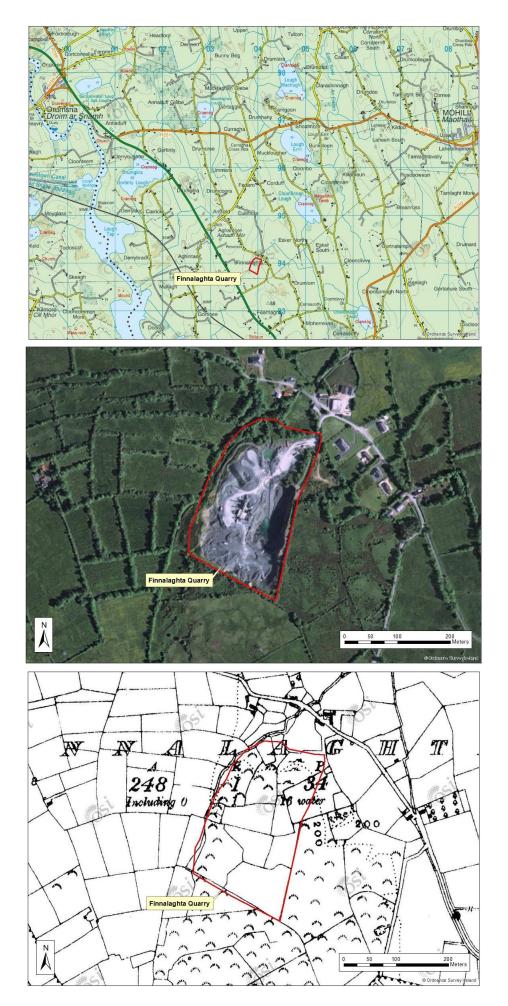
Western quarry face, near-vertical greywacke beds, close-up. Hammer for scale.



Southeast corner of quarry, Finnalaghta Formation greywacke. Remains of quarry stockpiles in foreground.



Eastern quarry face, northern end. Sallower dipping bedding with possible monoclinal structure visible (highlighted by traced line). Flooded excavation in foreground.



Parkes et al., 2020. Geological Survey Ireland.