LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER 65 GIS CODE LK017 Grange

IGH8 Lower Carboniferous Grange Grange 32 562530E 641990N GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

Former small quarry and adjacent hillside; quarry now in use as cattle pen.

Geological System/Age and Primary Rock Type

Coarse volcanic tuff breccias of the Mississippian (Lower Carboniferous) Knockroe Volcanic Formation.

Main Geological or Geomorphological Interest

The former quarry is an excellent exposure of tuff-breccias of the Knockroe Vitric-Lithic Tuff Member of the Knockroe Volcanic Formation.

During the early stages of volcanic activity, contact between seawater and magma resulted in explosive eruptions that led to formation of various deposits including tuffs and agglomerates. The rocks exposed here are coarse-grained lithic tuff breccias, with rocks clasts exceeding 100mm in length in places.

The clasts are typically sharp-edged and irregularly-shaped, though rounding is apparent in many instances. There is no evident sorting or alignment of clasts. Rocks types present as clasts include basalt and limestone, and white calcite clasts are prominent. Further north, finer, bedded airfall tuffs have been reported.

Site Importance – County Geological Site

This is an excellent exposure of tuff breccia, a significant component of the Limerick Volcanics. It is recommended as a County Geological Site.

Management/promotion issues

The site is a former quarry, its floor now in use as a cattle pen. It is not suitable for public access and is not recommended for further promotion.



General view of former quarry face and adjacent hillside.



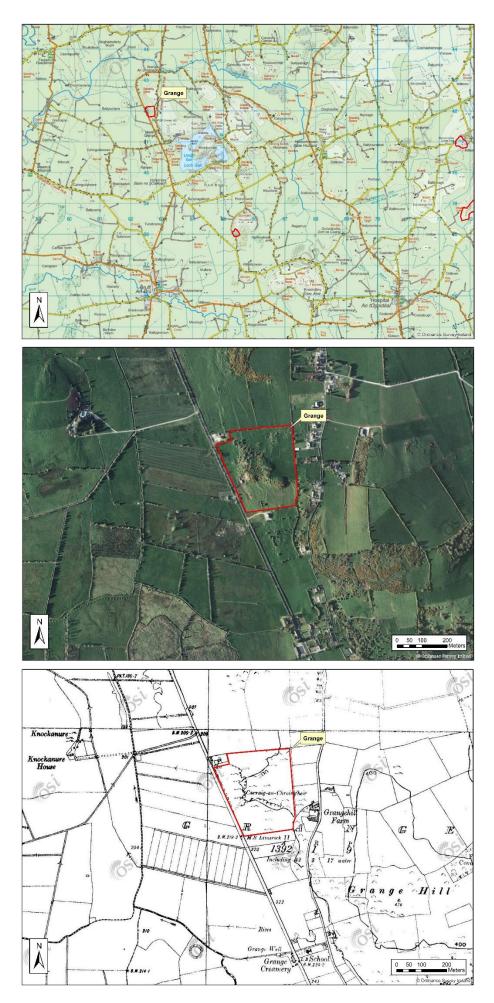
View of tuff breccia with unsorted lithic clasts.



Close-up of lithic clasts in tuff.



General view of former quarry face.



Meehan et al., 2021. Geological Survey Ireland.