

LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Kilteely Hill
Other names used for site	
IGH THEME	IGH11 Igneous Intrusions, IGH8 Lower Carboniferous
TOWNLAND(S)	Kilteely
NEAREST TOWN/VILLAGE	Kilteely
SIX INCH MAP NUMBER	33
ITM CO-ORDINATES	572680E 640970N (summit of hill)
1:50,000 O.S. SHEET NUMBER 65	GSI BEDROCK 1:100,000 SHEET NO. 18
GIS CODE LK019	

Outline Site Description

Small hill beside village, with moorland cover

Geological System/Age and Primary Rock Type

Trachyte plug and basalt lava of Knockroe Volcanic Formation, both Mississippian (Lower Carboniferous) in age.

Main Geological or Geomorphological Interest

Kilteely Hill comprises a trachyte plug or stock, infilling a former volcanic vent. As volcanic activity in this part of the volcanic field waned, the remaining basaltic magma fractionated, producing a magma of intermediate composition that was intruded into the vent where it cooled and hardened. It now remains as a hard, resistant rock that stands out from the surrounding basalt lavas.

The site contains excellent exposures of pink trachyte, especially on its southern and western sides. On the western side basalt lava is exposed near the base of the hill. The contact between lava and trachyte is not seen but the general field relationships between the two are well displayed.

Site Importance – County Geological Site

This is an excellent example of a trachyte emplaced as a volcanic stock or plug, with good exposures of both trachyte and enclosing basalt lava. It is recommended as a County Geological Site.

Management/promotion issues

The site is immediately adjacent the village of Kilteely. Although the site includes a public water supply reservoir it is on private land and is in use for grazing cattle. As the main geological features are readily observed from the nearby road, information about the site should be included in any field guides or walking guides produced in the future. Trailheads for several walking routes are located in the village. A signboard there could be updated to include general information on the Limerick Volcanics and specific information about Kilteely Hill.



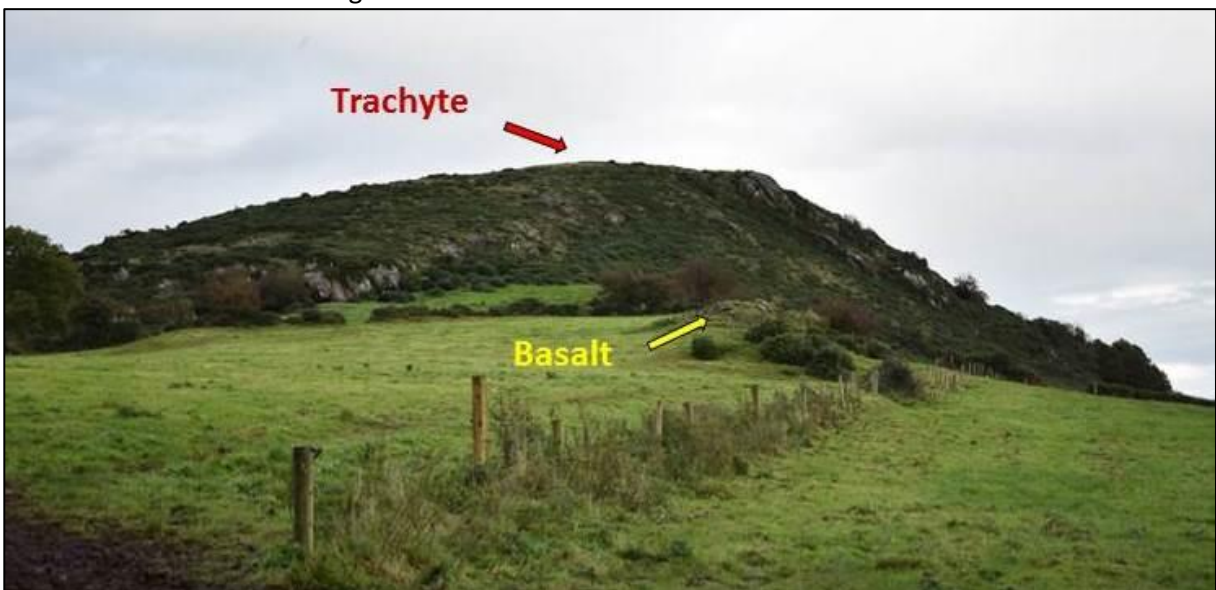
Kiltteely Hill trachyte plug stands out from lowlands underlain by limestone of Herbertstown Limestone Formation and basaltic volcanic rocks of Knockroe Volcanic Formation (view southwards from Knockseefin Hill).



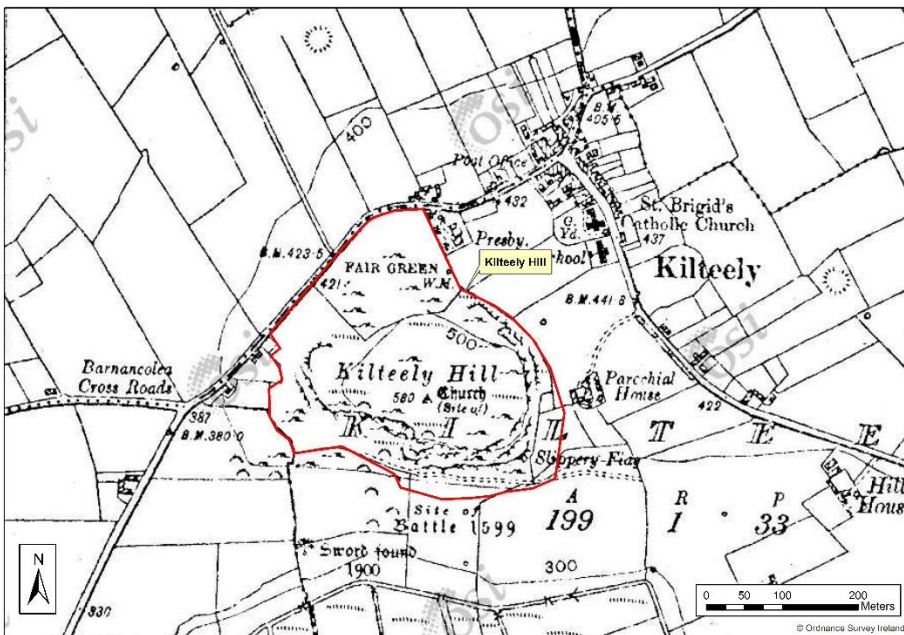
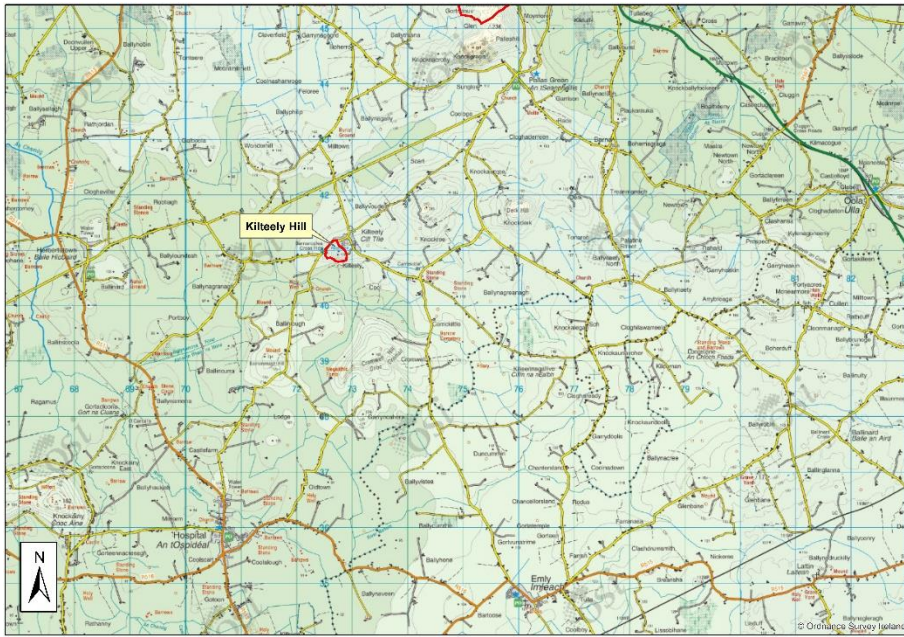
Trachyte on south side of summit with limestone lowlands in background.



Trachyte: weathered pink colour.



Kiltteely Hill trachyte stands out from surrounding basaltic rocks of Knockroe Volcanic Formation.



Meehan et al., 2021. Geological Survey Ireland.