

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Breagaun Hill Quarry
Other names used for site	
IGH THEME	IGH9 Upper Carboniferous and Permian
TOWNLAND(S)	Foillacamin
NEAREST TOWN/VILLAGE	Commons
SIX INCH MAP NUMBER	49
ITM CO-ORDINATES	628730E 654200N
1:50,000 O.S. SHEET NUMBER 67	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

Small abandoned quarry cut into side of hill, heavily overgrown.

Geological System/Age and Primary Rock Type

Upper Carboniferous (Pennsylvanian) Westphalian sandstone and siltstone.

Main Geological or Geomorphological Interest

This site is the location where sand volcanoes were discovered and reported in the 1950s. Sand volcanoes occur when water is forced upwards under pressure of compaction through the sediment layer, causing the sand to move upwards before settling back to form a cone-shaped “volcano”. Prior to this discovery, sand volcanoes had only been identified in Ireland in the Upper Carboniferous of Co. Clare.

The sand volcanoes in this site range up to 40 cm in diameter but most are recorded as being 10-20 cm in diameter. They were identified near the base of the succession exposed in the quarry. Samples collected in situ and from the floor of the quarry were subjected to detailed sedimentological and petrographic study.

It was not possible to observe the sand volcanoes during this audit as the quarry is very overgrown and only the upper part of the succession is exposed. The floor is also covered by thick undergrowth. Nevertheless, the rarity of sand volcanoes and the detailed descriptions available in the literature warrant the inclusion of this site.

In addition to sand volcanoes, sheet slumps were also described from the upper part of the succession – a possible slump was identified on the eastern face of the quarry.

Site Importance – County Geological Site

This is a significant location as one of the few localities in the country where sand volcanoes have been recorded.

Management/promotion issues

The quarry is overgrown and has evidently not been in use, even for grazing or storage, for many years. Surrounding land is pasture. As the sand volcanoes are not visible, promotion of the site is not warranted. It is likely to be of interest only to geologists or researchers.



General view northeast from quarry entrance of quarry showing overgrown quarry walls and floor and remaining exposed faces.



Detail of eastern quarry face – no definitive sedimentary structures visible, apart from bedding



General view of eastern quarry face showing extensive overgrowth.



General view of eastern quarry face with rounded internal contacts suggesting possible slump structures.

