

KILKENNY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Piltown
Other names used for site	
IGH THEME:	IGH 12 (Mesozoic)
TOWNLAND(S)	Brenar, Jamestown
NEAREST TOWN	Piltown
SIX INCH MAP NUMBER	39
NATIONAL GRID REFERENCE	245500 124800 = S 455 248,
1:50,000 O.S. SHEET NUMBER	75 1/2 inch Sheet No. 18

Outline Site Description

Borehole locations and a disused quarry.

Geological System/Age and Primary Rock Type

Late Jurassic to early Cretaceous clays and Lower Carboniferous limestone.

Main Geological or Geomorphological Interest

Situated about 3km north of Piltown, this site represents three boreholes drilled by Pasminco Australia Ltd in 1993. The core recovered from these locations produced some yellow and fawn clays within the Late Carboniferous karstic limestones. According to K.T. Higgs *et al.* (2000) analysis of floral and faunal material within the clay suggested that they were Late Jurassic to Early Cretaceous in age. This suggests that there was an active karst system prior to 145 million years ago, with a karstic or collapsed depression at Piltown that later filled with Jurassic/Cretaceous sediments. A disused quarry at the Sweep crossroads displays well exposed faces of Late Carboniferous limestone, as in the boreholes encountered in 1993. Remnant karst features and faunal fossils can be observed in this quarry.

Site Importance

Although effectively inaccessible, the main interest in this site is of considerable scientific importance. The Geological Survey would like to observe any future excavation/site investigation works that are to be carried out in this area. Therefore the boundary for this site only represents a scientific catchment area for the three boreholes. The disused quarry to the west of the site is a good indication of the local limestone geology. Potentially this site is of **international** importance due to the significance of the data retrieved from the three boreholes, with its evidence of terrestrial rather than marine rocks. It is proposed as a CGS here, but may later be proposed for NHA designation.

Management/promotion issues

Due to the hidden nature of this site there are no major management issues and for the same reasons it is not practical for general promotion. Kilkenny Council should advise GSI if any development proposals are made which include deep excavations or ground investigation (e.g. boreholes). The disused quarry is owned by Kilkenny County Council and appears to be operated as a storage yard, but could be used for local educational visits in consultation with Kilkenny County Council.



Left: A well exposed face of Late Carboniferous limestone, displaying an abundance of faunal fossils and occasional karst features. Owned by Kilkenny County Council this quarry is now used as a storage yard.
Right: Crinoid fossils found in the quarry.

Piltown

