

## CAVAN - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Kill</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH15 Economic Geology</b>
<b>TOWNLAND(S)</b>	<b>Kill</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Kilnaleck</b>
<b>SIX INCH MAP NUMBER</b>	<b>37</b>
<b>ITM CO-ORDINATES</b>	<b>642601E 790507N</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>34</b>
	<b>GS1 BEDROCK 1:100,000 SHEET NO. 12</b>

### **Outline Site Description**

The site comprises several outcrops and in-filled pits in a field of rolling grassland as well as a small spoil heap at the rear of a farm outbuilding.

### **Geological System/Age and Primary Rock Type**

The bedrock consists of grey Silurian shales of the Kilnaleck Shale Formation within which carbonaceous layers have been altered to coal.

### **Main Geological or Geomorphological Interest**

Kill is the only known location in the country where coal is found in Lower Palaeozoic rocks. Most coal found around the world resulted from lithification of plant material deposited in the Upper Carboniferous (Coal Measures). Hercynian deformations is considered to have remobilized graphite, converting the thin carbon(graphite)-rich horizons in the shale into a high-quality anthracite. The thickness of the coal-bearing layer varied from 3.4 m to mms (average 0.2m). Several pits were sunk in the 19<sup>th</sup> century and small amounts of the coal were raised but it proved to be practically incombustible and the workings were abandoned.

The site today is largely devoid of any trace of the former coal workings. A few flat outcrops of shale, without any apparent coal, occur near the road at the edge of the field in which the pits were sunk but the pits themselves are filled in. A grassed-over mound at the rear of the land-owner's farmhouse, adjacent the site of a former pit, contains shale fragments with small amounts of anthracite and is presumably a mine spoil heap.

### **Site Importance – County Geological Site**

Although the occurrence of anthracitic coal in shale at Kill is, as far as is known, unique in Ireland, the site contains little trace of mining. Only the presumed spoil heap beside the farm outhouse provides tangible evidence of coal. Nevertheless, its uniqueness means it should be granted recognition as a CGS.

### **Management/promotion issues**

The only visible remains of mining is the presumed spoil heap and, as this is essentially part of the back garden of the farmhouse, it is not a site that lends itself to promotion for public visits. Although the current landowner is aware of the spoil heap and the sites of former coal pits, the heap is vulnerable to removal or alteration as part of any future farm works.



Kill, view to east of area formerly mined for coal.



Area behind farmhouse with grassed-over spoil heap, to right of outhouse, in front of site of former pit.



Outcrop of shale at entrance to field shown in main image.





