

# WICKLOW - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Cloghleagh Mine</b>		
Other names used for site	Cloghlea Mine, Cloughleagh Mine		
<b>IGH THEME</b>	<b>IGH 6 Mineralogy, IGH 15 Economic Geology</b>		
<b>TOWNLAND(S)</b>	<b>Cloghleagh</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Blessington</b>		
<b>SIX INCH MAP NUMBER</b>	<b>5, 6</b>		
<b>ITM CO-ORDINATES</b>	<b>705270E 717160N (centre of feature)</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>56</b>	<b>GSi BEDROCK 1:100,000 SHEET NO:</b>	<b>16</b>

## Outline Site Description

A small, probably quarried, escarpment of rock includes a small mine adit, with some remnant crushing equipment on the flat terrace.

## Geological System/Age and Primary Rock Type

The iron and manganese minerals are within a brecciated (broken up) fault zone within the Leinster granite and are found within a vein quartz breccia. The age of mineralisation of the fault zone is unknown, but is thought to be associated with faulting from around 12 million years ago, and possibly connected to that at Deerpark cave and Glasnamullen near Powerscourt in east Wicklow.

## Main Geological Interest

The site contains a fault zone with minerals which can be seen close up in the buttress of rock on the escarpment. These are the manganese oxide ores hollandite and cryptomelane, part of a mineral series, with variable compositions of the elements potassium and barium. The fault zone is possibly tens of metres wide, with extensive explosive brecciation of quartz veins, and banded quartz fragments in a broken matrix are seen in the rock buttress and in the minor mine working. It is believed that this fault structure is related to faulting around 12 million years ago, also seen at the Deerpark Cave and at Glasnamullen near Powerscourt.

Two large cut stones are seen on the site and these are remnants of a large cone crushing device installed when the mine was worked in 1862-1868, but possibly never assembled. A third piece of this device was previously seen on site, but is reported as having been removed by the Army to a nearby military base. There was also formerly a substantial building ruin on the opposite side of the track, built by Reverend William Ogle Moore, an original promoter of the mine.

## Site Importance - County Geological Site

The occurrence of manganese minerals in Ireland is poorly understood since few modern analyses have been done on the different minerals, most of which were identified simply as one of them - psilomelane. The geological study and analysis done here makes this a site of some importance, worthy of CGS recognition.

## Management/promotion issues

Unfortunately the mining heritage interest of the site has been diminished by the demolition and removal of the former mine owner's house. Similarly, the reported removal of part of the cone crushing machine grinding stone is regrettable and it would be best to see it reinstated on site. Despite these issues, there is interest in the site and it could be promoted on site by an explanatory signboard. It might be better treated as part of a wider trail, with apps or guidebooks available elsewhere which would provide a visitor with explanation. Perhaps a simple Q code sign attached to the grinding stones would lead a visitor to a website with historical pictures. A minor adit is clearly visited, despite being well hidden, but it is in stable rock and is not a safety hazard.



Group examining the quartz breccia on the fault plane, dipping steeply from right to left.



The former mine owner's house, presumably demolished by Coillte in recent decades.  
Right: some fragments of the mineralisation lying around near the crusher stones.



Group examining the two remaining stones of a cone crusher.





