

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Glengowla Lead Mine</b>
Other names used for site	Glengowla Mine
<b>IGH THEME</b>	<b>IGH6 Mineralogy, IGH15 Economic Geology</b>
<b>TOWNLAND(S)</b>	<b>Glengowla East</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Oughterard</b>
<b>SIX INCH MAP NUMBER</b>	<b>54</b>
<b>ITM CO-ORDINATES</b>	<b>508625E 741820N</b>
<b>1:50,000 O.S. SHEET No. 45</b>	<b>GSI BEDROCK 1:100,000 SHEET NO. 11</b>

### **Outline Site Description**

Nineteenth century lead mine reopened as tourist mine with accessible underground and surface mine features.

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

Marbles of the Precambrian Dalradian Lakes Marble Formation cut by a calcite vein containing galena and other base-metal sulphides.

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

Glengowla Mine was operational between 1850 and 1865, producing lead, pyrite and silver. There are four shafts on the site, the deepest reaching a depth of over 20 m, while the mine extends laterally over 100 m. The main lode has a gangue of calcite and barite and contains galena and pyrite as the major sulphide minerals, with minor chalcopyrite and sphalerite. Green fluorite and quartz also occur. The development of mineralization at Glengowla is generally considered to be related to intrusion of the Oughterard Granite, the southern margin of which lies 300 m to the north.

Glengowla Mine is one of the few former mines in Ireland that have been reopened as visitor attractions. It is of significant importance as a geological heritage site, not least because of the unique access it affords to examine a mineral deposit *in situ*. The mineralized lode, ore and gangue minerals and the host rocks are all well displayed, and the mine workings provide valuable information about the operational conditions in the mine. In addition, mineral samples discovered underground during excavation works form the basis of a high-quality mineral collection in the small museum on the site, where numerous original mine implements are also displayed. Original surface features include a restored Cornish powder house (magazine), wheel pit and associated water course, mine agent's house and an as yet unexcavated area where traces of buddles and other mineral processing equipment can be seen. Modern installations attempt to provide an indication of the kind of structures and machinery in place on the site when operational.

### **Site Importance – County Geological Site; may be recommended for Geological NHA**

This is a significant County Geological Site. It is unique in that it offers public access to examine an underground metal mine and the exposed mineralization within it. Glengowla contains the best exposure of mineralization in County Galway.

### **Management/promotion issues**

The mine is open from March to October. As a commercial visitor attraction it does not require promotion. The site, including as yet unmapped/unexcavated features such as the processing floor, extends over a considerable area and care is required to maintain its integrity in the event of future development.



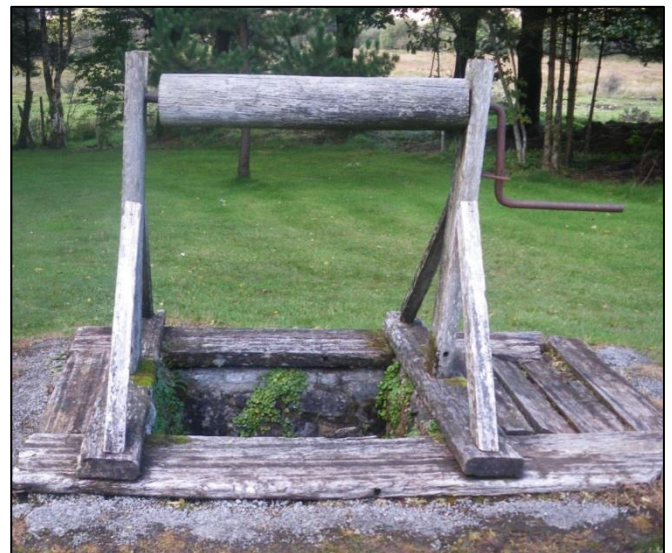
Underground: striped marbles of Lakes Marble Formation above calcite lode with barite and pyrite.



Underground: outcrop of coarse crystalline galena (metal grey) in calcite gangue.



Wheel pit for “18-foot wheel” that was used for pumping water from mine.



Modern surface recreation of hand winding stow used for raising ore from Paul's Shaft.



Restored Cornish powder house or magazine.



