

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Silvermines
Other names used for site	
IGH THEME	IGH 15 Economic Geology
TOWNLAND(S)	Ballygown South, Knockanroe, Garryard West, Gortshaneroe, Gorteenadiha, Shallee
NEAREST TOWN/VILLAGE	Silvermines
SIX INCH MAP NUMBER	26
ITM CO-ORDINATES	580300E 671300N (west), 584200E 671700 (east)
1:50,000 O.S. SHEET NUMBER 59	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

The Silvermines District, on the northern flank of the Silvermines Mountains, extends west for 5 km from the village of Silvermines. Mining took place intermittently from at least the 13th century until 1992. Zinc, lead, silver, copper and barite were produced, with the bulk of production taking place in the second half of the 20th century during a period of large-scale modern mining by Mogul. Evidence of the long mining history at Silvermines is everywhere visible in the district where 19th-century Cornish engine houses sit close to the remains of modern processing plants, waste heaps and open pits.

Geological System/Age and Primary Rock Type

The mineralization at Silvermines is hosted by basement rocks of the Silurian and Devonian Old Red Sandstone and by the overlying Lower Carboniferous succession. Mineralization occurs in two styles: (1) in fracture zones and as replacements within the Silurian greywackes, Devonian clastics and Lower Dolomite of the Carboniferous Argillaceous Bioclastic Limestone and (2) as stratabound zones within the succeeding brecciated and dolomitized Carboniferous Waulsortian reef limestone.

Main Geological or Geomorphological Interest

Silvermines is one of Ireland's largest historical metal mining districts, with perhaps the longest recorded history of all. It contains extensive remains of mining activity from the last few centuries. As such it is of major geological heritage importance. Along with Navan and Tynagh mines, it was among the earliest deposits hosted by Carboniferous rocks to be exploited by modern mining techniques and like them has been a focus for intensive modern scientific research aimed at understanding the development of so-called Irish Type Zn-Pb deposits.

Site Importance – NHA

The district as a whole should be considered for NHA status, given the range of accessible 19th and 20th century mine features it contains. Individual sites should certainly be listed as County Geological Sites.

Management/promotion issues

Virtually all of the Shallee site is within the Silvermines Mountain West SAC while most of the Gorteenadiha site is within the Slievefelim to Silvermines Mountains SPA. Several 19th century mine buildings at Ballygown and Shallee underwent modern conservation works in the mid-2000s and information panels were installed at both sites to provide information on the mining history. However, as observed during this audit, the buildings are already showing signs of being adversely affected by unchecked growth of vegetation while at least one panel is missing. Unchecked growth of vegetation has obscured much of the Shallee site. There is a need for active management of the sites within the district if the geological heritage is to be preserved.