CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER GIS CODE Glandore Mine Aughatubbrid Mine, Aghatubrid Mine IGH15 Economic Geology, IGH6 Mineralogy Aghatubrid Beg Glandore 142 522184E 536329N (Chimney on-site) 89 GSI BEDROCK 1:100,000 SHEET NO. 24 CK048

Outline Site Description

Glandore Mine is a disused mine site on the side of a small hill between the main outlet of Glandore Harbour and the village of Leap, about 6 km west of Rosscarbery.

Geological System/Age and Primary Rock Type

The mineralization is hosted by the Toe Head Formation which is faulted against the Old Head Sandstone and Castlehaven Formations. The rocks are therefore all Upper Devonian in age, deposited 419 to 359 million years ago.

Main Geological or Geomorphological Interest

Glandore Mine was known principally as a manganese (Mn) mine and is the only significant manganese mine recorded in Ireland. A smaller amount of iron and copper was also raised.

High concentrations of copper were known to occur in peat in a small bog in the Glandore area by 1810. The peat was burned for cupriferous ash between 1812 and 1816, producing 262 tonnes of 10-15% copper ash at that time. The main lode at Glandore was then discovered, in 1840, and opencast mining of manganese began. This lode was approximately 5 m wide and 43 m long and dipped steeply southwards. In 1869 a copper lode was discovered below the manganese mineralization, but only around 70 tonnes of copper ore were sold. Further manganese mining then took place on a small scale between 1876 and 1882, and again in 1908 and 1909. Altogether, around 18,000 tonnes of manganese and 1,000 tonnes of iron ore were raised during the life of the mine.

In 1884 George Henry Kinahan, then Senior Geologist at the Geological Survey of Ireland, described the ore at Glandore as "angular quartz breccia cemented by hematite (Fe_2O_3) and later manganese (pyrolusite (MnO2)), possibly a capping to a quartz-barite-chalcopyrite (CuFeS₂) lode".

Though the mine is long-abandoned, the engine house on the site is an impressive structure, with an intact chimney. The bob wall faces the old opencast pit, and a poorly fenced, collapsed shaft close to it is presumably the engine shaft. No trace has been found recently of several other (at least six) shafts that are marked on old plans. The mine is drained by a deep adit, which runs along a line from the copper shaft to the open pit and thence northwest, beneath the road facing the site. The mouth of the adit is close to the small stream that runs through the valley floor to the northwest. The adit has now partially collapsed and its mouth is obscured by vegetation and recently-deposited spoil. A small flow of mine water discharges from it.

Site Importance – County Geological Site

Though the pit is completely obscured and the only real evidence of a former mine on the site is the engine house and chimney, Glandore was unique in being the only manganese mine in Ireland. As such it is of considerable geological importance and merits designation as a County Geological Site.

Management/promotion issues

The site is located at the end of a narrow laneway that leads to a private house, which is immediately east of the engine house. The site is likely to be of interest mainly to professional and academic geologists and does not warrant further promotion. Permission should be sought for access.



The Glandore Mine site, viewed from the south.



"Private Property" sign at site's northern entrance.



The chimney and engine house on the site.



The path of the adit towards the stream at the northwest, now overgrown and partially obscured by imported spoil.



Hennessy et al., 2023. Geological Survey Ireland.



Glandore Mine (top) and the Engine House (below), both photographs taken 1939 (Source: Geological Survey Ireland Mine History database).

