GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Bohaun
Other names used for site Bothán

IGH THEME IGH6 Mineralogy, IGH15 Economic Geology

TOWNLAND(S) Bothán (Bohaun)

NEAREST TOWN/VILLAGE Corr na Móna (Cornamona)

SIX INCH MAP NUMBER 26

ITM CO-ORDINATES 500690E 756340N

1:50,000 O.S. SHEET No. 38 GSI BEDROCK 1:100,000 SHEET NO. 11

Outline Site Description

Steep upland moorland (grassland and blanket bog) with large areas of outcrop.

Geological System/Age and Primary Rock Type

Silurian rocks of the Lettergesh Formation (volcanogenic sandstone, siltstone and mudstone), Kilbride Formation (sandstone, mudstone, conglomerate, quartzite and fossiliferous calcareous sandstone and mudstone) and Lough Mask Formation (purple sandstone).

Main Geological or Geomorphological Interest

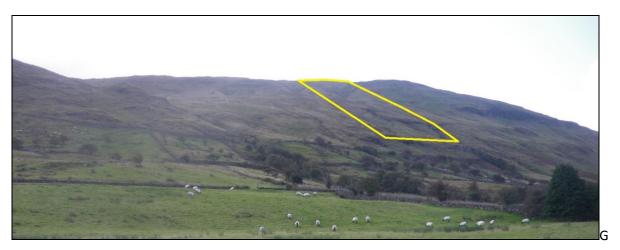
The original Geological Survey mapping defined a quartz "vein" trending north-south across the mountain ridge at Bohaun, in excess of a kilometre long. Exploration in the late 1980s recognized this feature as a large, 1.6 km-long epithermal gold-bearing structure with evidence of polyphase deformation. The mapped structure consists of a zone of silicified breccias comprising clasts from the host Lettergesh Formation in quartz. The breccias have themselves undergone shearing. Visible gold was recorded during exploration and sampling of outcrop yielded values of over 400 g/t Au, with grades increasing within sheared zones. Follow-up drilling intersected grades of 8.7 g/t Au over 0.8 m. The deposit was considered uneconomic, especially as the highest grade gold was from float material i.e. not in-situ.

Site Importance – County Geological Site

This site contains a well-exposed, very extensive epithermal gold-bearing structure with abundant outcrop allowing opportunity to observe a range of features, including brecciation textures and deformation (shear) structures. Visible gold has been reported from the site but was not observed during this audit.

Management/promotion issues

The site is within the Maumtrasna Mountain Complex proposed NHA. Land use is low-intensity sheep grazing. There do not appear to be any threats to the site. As it is likely to be mainly of interest to researchers, the site does not require promotion.



General view of outcrop area (approximate) of quartz vein, looking southwest.



Massive 0.3 m-thick quartz vein on left, cutting zone of brecciation/quartz net-veining. Shear structures run sub-parallel to the quartz vein, cutting and off-setting the thin quartz veins. Pen (150 mm long) for scale.

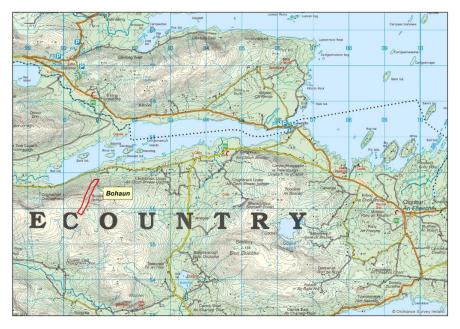


Close-up of brecciation and net-veining seen in outcrop above. Note later shearing/faulting of veins.

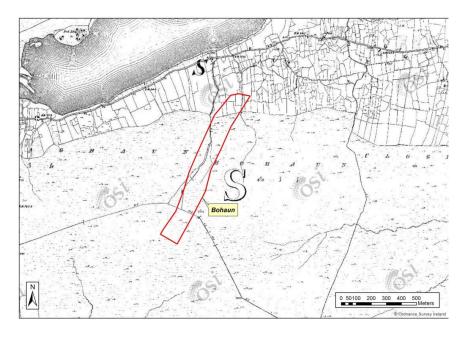


Quartz vein on summit, with pink quartz.

Meehan et al. 2019. Geological Survey Ireland.







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