

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Copper Coast – Knockmahon and Stage Cove |
| Other names used for site | |
| IGH THEME | IGH4 Cambrian - Silurian |
| TOWNLAND(S) | Knockmahon |
| NEAREST TOWN | Bunmahon |
| SIX INCH MAP NUMBER | Waterford 25 |
| NATIONAL GRID REFERENCE | 244298 98648 (access at Stage Cove) |
| 1:50,000 O.S. SHEET NUMBER | 82 1/2 inch Sheet No. 22, 23 |

Outline Site Description

The site comprises coastal cliffs and the bay at Stage Cove, and Knockmahon beach to the east of it.

Geological System/Age and Primary Rock Type

Ordovician volcanic rocks such as andesite and rhyolite are injected into sediments such as muddy limestone and slate at the site.

Main Geological or Geomorphological Interest

A main feature of interest here is the Pipes of Baidhb – an intrusion of rhyolite, which has cooled with polygonal columns, perpendicular to the surface of the intrusion. It forms an arch in the cliffs and is reminiscent of the Giant's Causeway, although it is much older. However, weathering is causing the columns to collapse and it is an ever changing feature through the years.

There are also andesite intrusions running through the sedimentary rocks, and andesite tuffs interbedded with the shales.

At Knockmahon, and in Stage Cove especially, there are numerous mine shafts on the cliff top and adits into the cliffs that reflect the mineralised veins, which run northwest-southeast through this site. One mineralised fault in particular is eroded out as a gully. Stage Cove has a slipway, which was used in shipping copper ore out, and also has remains of a Copper Yard with a cobbled floor.

Site Importance

The site is part of the complex of sites along the Copper Coast, which collectively are of national importance and which are already part of a proposed NHA (Ballyvoyle Head to Tramore No 1693).

Management/promotion issues

Access to this site is not easy and descending the gully is not recommended. A grassy path down to beach level is found to the east of the gully. Loose rock fragments do fall down here, certainly on a windy day, and rockfalls, such as at the columnar jointed intrusions, are apparent from the debris at beach level, so caution must be exercised. The mine shafts and adits also require significant care, and should not be entered except in the company of experienced mine explorers (such as the Mining Heritage Trust of Ireland).



Blue copper gels stain the walls of some of the adits but they are wet and easily damaged.



Part of the Pipes of Baidhb.



Mine adits in the cliff.



A panorama view of Knockmahon site looking west.



A panorama view of Knockmahon site looking east, with the Pipes of Baidhb in the near cliff.



