

**Site Name: Hafan Mine**

**Grid Ref: SN 730880**

**RIGS Category:** Educational & Scientific

**Earth Science Category:** Mineralogy

**1:50,000 Geological:** BGS Sheet 163, Aberystwyth

**RIGS Statement of Interest:**

Hafan Mine, which can be considered in conjunction with the nearby proposed RIGS at Henfwlch Mine, provides an excellent opportunity to examine in situ exposures revealing early and late aspects of the Central Wales mineralisation, in the form of two mineralised fractures running side-by-side. In addition there are large spoil heaps which provide abundant samples for both field and laboratory study. Hafan Mine is set amidst spectacular mining scenery and an important archaeological feature is the great stone incline which formerly carried a railway up to the quarries at Carn Owen during the 1880s. The host rocks at the mine and also the stone worked at the quarry consist of massive, locally slumped, indurated sandstones belonging to the Drosgol Formation of Upper Ordovician (Ashgill) age.

At Hafan Mine, the earlier and later mineralised fractures, belonging to the Hafan Lode, are only separated by a small distance, whereas at Bwlchglas Mine, 1.75 km to the west, the same early and late components are seen underground to be tens of metres apart. The early mineralisation is exposed along a series of open stopes showing ferroan dolomite-rich breccias carrying a mineral assemblage comprising quartz, sphalerite, galena and chalcopyrite, which has been re-brecciated and cemented by large amounts of rusty-weathering ferroan dolomite. Later mineralisation comprises quartz and very minor galena with traces of calcite. An assemblage of secondary minerals is also present in small amounts; it includes small specimens of pyromorphite, cerussite, linarite, malachite, hemimorphite, aragonite, native sulphur and anglesite.

**Surveyed by:** J.S. Mason