Site Name: Nantyreira Mine Grid Reference: SN 828874

RIGS Category: Educational & Scientific Earth Science Category: Mineralogy

Geology 1:50,000: BGS Sheet 163, Aberystwyth

## **RIGS Statement of Interest:**

Nantyreira Mine is of regional geological importance because it provides an example of the earlier mineralisation of the Central Wales Orefield occurring to the east of the Plynlimon Inlier. This is unusual because the vast majority of occurrences of the early mineralisation are on the western and northern flanks of the inlier. In addition, the mine is considered to be a nationally important archaeological site where mining activity has extended back to Bronze Age times. The mineral vein is hosted by massive grits of the late Ordovician (Ashgill Series) Drosgol Formation and, in the context of other lodes in the Central Wales Orefield, is anomalous in that it trends N-S as opposed to the more usual ENE-WSW direction. The reason for this anomaly remains unexplained.

The primary mineralisation is dominated by chalcopyrite, galena and quartz, numerous specimens of which occur on spoil tips near the old wheel pit. Ferroan dolomite is also abundant throughout the site. Later mineralisation comprises layers of stumpy quartz crystals on fracture surfaces with associated chalcopyrite, followed by calcite. Secondary minerals are common and include malachite and cerussite, accompanied by pyromorphite. Less commonly, small amounts of linarite, brochantite and cuprite are also present.

Surveyed by: J.S. Mason