

Site Name: Cwmsymlog Mine **Grid Reference: SN 699 837**

RIGS Category: Educational, Historical & Scientific

Earth Science Category: Mineralogy

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

RIGS Statement of Interest:

Cwmsymlog Mine is one of the finest of the old mine-sites of Ceredigion, in an area where landscaping programmes have elsewhere taken a heavy toll on the mining heritage. It was a fabulously wealthy source of silver as long ago as the late 16th Century; Lewis Morris – the antiquarian, writing in 1744, said of Cwmsymlog that it was “the principal silver mine we ever had in Britain” and “the richest in lead & silver of any in his Majesty’s dominions”. Cwmsymlog lies at the core of a part of the Central Wales Orefield that is notable for the common presence of the silver-bearing mineral tetrahedrite (Cu,Ag₁₂As₄S₁₃) which chiefly occurs as microscopic inclusions in galena. Central Wales tetrahedrite commonly contains as much as 20 wt% silver, and the galena from Cwmsymlog Mine can contain in excess of 1 kg/ton (>1000 ppm) Ag.

The mineralisation at Cwmsymlog consists of breccia cements dominated by quartz (with very minor ferroan dolomite), but also including abundant galena and chalcopyrite, with largely microscopic bournonite and ullmannite accompanying the tetrahedrite. Late-stage mineralisation is limited in its development but includes small amounts of sphalerite, pyrite/marcasite and calcite. Secondary mineralisation is also uncommon, and consists of thin coatings of cerussite, pyromorphite, malachite, linarite and yellow antimony oxides.

Surveyed by: J.S. Mason