

Site Name: Penyegeulan Quarry **Grid Reference: SN 904 537**

RIGS Category: Scientific

Earth Science Category: Ordovician (Ashgill) Stratigraphy

Geology 1:50,000: BGS Sheet 196, Builth Wells

RIGS Statement of Interest:

This RIGS is a small slate quarry, now disused, in a valley north of the main road between Llanwrtyd Wells and Builth Wells. The rocks are late Ordovician mudstones and siltstones that were deposited as turbidites from fast moving density currents in an offshore marine setting, then were deformed and cleaved during the Late Caledonian (Acadian) plate-tectonic collision events. Of particular interest are the sedimentary features of these rocks that are superbly displayed in the slates and slabs of the waste tips. Also important, the rock formation so well exposed here is absent from some areas only a few kilometres away to the east. In those areas, it was removed by erosion because of global sea-level fluctuations associated with late Ordovician climate change and glaciation. Penyegeulan quarry therefore provides key information about a rock unit often missing elsewhere. Moreover, the rocks of this formation in areas to the west were commonly disturbed by sliding and slumping on the sea-floor. At this RIGS there are excellent opportunities to study the sediments in their undisturbed state.

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