

Site Name: Tynygraig Railway Tunnel **Grid Reference: SN 692684**

RIGS Category: Aesthetic, Historical & Scientific

Earth Science Category: Structure & Silurian (Llandovery) Stratigraphy

1:50,000 Geological: BGS Sheet 178, Llanilar

RIGS Statement of Interest:

This RIGS is a c. 15 m long tunnel along part of a former railway, and is important for several reasons. The rock section includes sandstones similar to, but much thinner than, those of the same early Silurian age being extracted at Hendre Quarry (RIGS 15) c. 3 km to the east. In the railway cutting about 1 km to the north (RIGS 27) the same aged rock sequence consists entirely of mudstone and siltstone. These contrasts are attributed to different environments on the seafloor. The sandstones here and in Hendre Quarry were deposited on a fan-like lobe by water flowing swiftly westwards down a submarine channel from a shallow marine region in the Welsh Borderlands. The mud and silt seen in the RIGS 27 cutting were deposited beyond the sand lobe, further from the submarine channel, by relatively gentle water currents. This tunnel exposure therefore offers important information for reconstructing the early Silurian palaeogeography of Central Wales.

In the tunnel wall, near the entrance, is a spectacular anticlinal fold of sandstone layers. This structure provides key information about the regional deformation in Devonian times. As important, the tunnel designers artistically framed the fold in a brick arch, making this RIGS an interesting aesthetic and historical site.

Surveyed by: W.R.Fitches