
The sequence at Ruby Brickworks

This old quarry [SJ 207 677] behind the brickworks, 0.75 km north of Rhydymwyn, near Mold, Clwyd shows part of the upper Namurian, as developed in the northern parts of North Wales. The geology is mentioned by Wood (1936).

Lithostratigraphy at Ruby Brickworks

There are two separate exposures at this site, from which it is impossible to establish a continuous sequence. The stratigraphically lower part of the sequence is about 15 m of shales, siltstone and thin sandstones. Particularly in the coarser-grained strata are coal smuts and casts of stems (mainly *Calamites*), suggesting they were littoral or terrestrial deposits. However, there are also at least two other horizons representing marine conditions.

The higher strata are more arenaceous, consisting mainly of alternating sandstones and siltstones, the former becoming more dominant towards the top of the section. Except at the very base of this unit, where they are quartzitic, the sandstones are mainly feldspathic, sometimes with cross-bedding. The siltstones are very soft and friable, often with ripple laminations. These beds are thought to belong to the Lower Gwespyr Sandstone Formation, about 315 million years old.

Biostratigraphy at Ruby Brickworks

Two marine bands occur within the shales in the lower part of the sequence. Full species lists have not been published, but they are claimed to yield the index ammonoids for the Superbilinguis and Cancellatum marine bands (Wood, 1936). The exposed sequence here thus ranges from upper Marsdenian to lower Yeadonian.

Significance of the site

This is the best exposure of the Lower Gwespyr Sandstone, a major unit of fluvio-deltaic deposits in the upper Namurian of the northern part of North Wales. It correlates with the upper part of the Aqueduct Formation near Llangollen (see section discussing Dee Bridge), but is significantly finer grained and thus more like the topmost sandstones of the Millstone Grit in the main part of the Central Province (e.g. the Haslingden Flags — Bristow, 1988). It thus demonstrates the progressive increase in subsidence going away from the Wales–Brabant Barrier.

[References](#)