

**Site Name: Upper Borth**

**Grid Reference: SN 603886**

**RIGS Category:** Scientific

**Earth Science Category:** Structural Geology and Silurian (Llandovery) Stratigraphy

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

**RIGS Statement of Interest:**

This RIGS is a c.150 m long sea cliff section and foreshore area immediately south of Borth promenade. Here the rocks of the Borth Mudstone Formation are particularly well-exposed and accessible and provide spectacular examples of fine-grained turbidites, marine sediments carried into the Welsh Basin in the Early Silurian Period from SW Wales by swift-flowing bottom currents. One of their interesting features, and a reason why this RIGS is visited by field classes, is the difference between them and the slightly younger Aberystwyth Grits exposed along the coast to the south. A major interest of the site is the belt of unusually thick quartz veins that appear to be strongly deformed with the host sedimentary rocks: no research has been carried out on these veins to establish their origin and regional significance. Smaller veins, on the other hand, have been discussed in the scientific literature, remain a source of controversy and require further study.

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