



## South Wales RIGS Group Site Record RIGS Description

### SECTION A

General	South Wales
<b>Site Name:</b> Coedbychan Quarry	<b>File Number:</b> Site_CCC_59
<b>RIGS Number:</b> 654	<b>Surveyed by:</b> South Wales Geologists' Association
<b>Grid Reference:</b> ST 1270 7740	<b>Date of Visit:</b> 30 <sup>th</sup> March 2009
<b>RIGS Category:</b> Scientific, Educational	<b>Date Registered:</b>
<b>Earth Science Category:</b> Stratigraphical	
<b>Site Nature:</b> Disused Quarry	<b>Owner:</b> Unknown <b>Planning Authority:</b> Cardiff County Council
<b>Unitary Authority:</b> Cardiff County Council	<b>Documentation prepared by:</b> Rhian Kendall
<b>OS 1:50,000 Sheet:</b> 171	<b>Documentation last revised:</b> 4 <sup>th</sup> Aug 2009
<b>OS 1:25,000 Explorer Sheet:</b> 151	<b>Photographic Record:</b> Attached
<b>BGS 1:50,000 Sheet:</b> E263	
<p><b>RIGS Statement of Interest:</b></p> <p>The Coedbychan Quarry site has been nominated as a RIGS as it is the best place in the county of Cardiff to examine the Marginal Facies of the Blue Lias.</p> <p>The site is also very useful as an educational site as it displays a number of sedimentary features in a very easily accessible, relatively safe environment.</p>	

**Geological setting/context:**

Coedbychan Quarry is developed in the Marginal Facies of the Blue Lias. This quarry falls within the St Fagans fault bounded outlier of the Porthkerry Formation in this area. It is the only example of this age rock chosen as a RIGS, to represent its age range within the county boundaries of Cardiff.

During the late Triassic, and into the early Jurassic, there was a widespread marine transgression, depositing sediments in a shallow continental sea that extended across much of Southern Britain.

The origin of the typical cyclical limestone and shale sequences are subject to some controversy. The traditional view that they represent shallowing and deepening events or climatic oscillations controlling terrigenous input is compared to a secondary mechanism where it is thought that diagenetic redistribution of carbonate vertically and horizontally is responsible for the interbedded limestones and shales.

Ref: Waters and Lawrence 1987

The quarry provides good exposures of the Blue Lias, Porthkerry Member Marginal Facies in exposed faces up to approximately 10m high. Wavy based bedding to the limestone beds which are up to approx 30cm thick. Limestones are mid grey, weathering to pale cream, very fine grained, hard, brittle fracture some layers are very sandy, grading to calcarenites. Mudstone layers are subordinate and are dark grey, fine grained, friable.

The beds dip NNW at about 10°.

**References:**

WATERS, R A and LAWRENCE, D J D. 1987. Geology of the South Wales Coalfield, Part III, the country around Cardiff. BGS

## SECTION B

### PRACTICAL CONSIDERATIONS:

Please score Accessibility and Safety Red Amber or Green

#### Accessibility:



Comment: Easy walking access from well made paths.

#### Safety:



Although relatively stable at the time of writing, the high cliffs could crumble so hard hats would be recommended. Approach from the north could be dangerous due to high cliffs.

### OWNERSHIP/PLANNING CONTROL:

**Owner/tenant:** Unknown

**Planning Authority:** Cardiff County Council

**Planning status/constraints/opportunities:**

There are no known planning constraints or opportunities

### CONDITION, USE & MANAGEMENT:

**Present use:** The disused quarry forms part of a "wild" woodland.

**Site condition:** Good, tending to be vegetated in summer months

**Potential threats:** Under pressure from illegal dumping

**Site Management:** Site needs rubbish removing and vegetation clearance

**Other comments:**

### SITE DEVELOPMENT:

**Potential use (general):**

**Potential use (educational):** Good site for teaching because it is easily and safely accessible (hard hats and supervision would be recommended because of the drop at the northern perimeter of the site). This is the only inland exposure of this formation recommended by this report.

## Photographic Record

