



South Wales RIGS Group Site Record RIGS Description

SECTION A

General	South Wales
Site Name: St y Nyll	File Number: Site_CEB_1
RIGS Number: 655	Surveyed by: Elaine Burt
Grid Reference: ST 0994 7821	Date of Visit: 26 th January 2011
RIGS Category: Scientific, educational	Date Registered: Owner: Unknown Planning Authority: Vale of Glamorgan Council
Earth Science Category: Stratigraphical, Sedimentological	
Site Nature: Disused quarry	Documentation prepared by: Elaine Burt
Unitary Authority: Vale of Glamorgan Council	Documentation last revised: 1 st February 2011
OS 1:50,000 Sheet: 171	Photographic Record: Attached
OS 1:25,000 Explorer Sheet: 151	
BGS 1:50,000 Sheet: E263	
RIGS Statement of Interest:	
<p>This site is an old quarry in the Marginal Facies of the Blue Lias Formation. This facies is unique in South Wales and is equivalent to the upper parts of the Porthkerry Member.</p> <p>The quarry faces display a number of sedimentary features of interest and it is useful to be able to examine these rocks close up for educational purposes.</p>	

Geological setting/context:

The old quarry near the windmill at St y Nyll displays a section, approximately 6m thick, in the Jurassic age Marginal Facies of the Blue Lias Formation. The Marginal Facies is developed within the upper part of the Porthkerry Member, which lies at the top of the Blue Lias Formation in this area.

The section visible in the quarry comprises mainly irregular bedded, shelly packstones (limestones) of a pale grey colour, which weather to fawn. The limestone beds are up to 50cm thick and are massive in part, but some laminations are present. Rare beds show floating ooids. More common are silicified fossil debris of echinoderm and bivalve origin. The undulating bed partings are characteristic of this unit (Waters and Lawrence, 1987). Dark to pale grey, thin, mudstone partings are visible between the limestone beds. Chert nodules are also present in places.

The Marginal Facies is thought to be in the *bucklandii* fossil zone and is shown in the St Fagans Borehole to be 32m thick (Waters and Lawrence, 1987). The borehole is the only known complete section through the Marginal Facies, however this quarry site is a useful place to study a variety of sedimentological features of this unit. The quarry section is likely to be in the lower part of the Marginal Facies near to the boundary with the underlying Porthkerry Member.

An old limekiln marked in the quarry indicates the use was for lime as well as possibly for local building stone.

References:

WATERS, R A and LAWRENCE, D J D. 1987. Geology of the South Wales Coalfield, Part III, the country around Cardiff. 3rd edition. Memoir of the British Geological Survey, Sheet 263 (England and Wales).

SECTION B

PRACTICAL CONSIDERATIONS:

Please score Accessibility and Safety Red Amber or Green

Accessibility:



Comment: The access is just to the side of a well maintained 'Valeways' public footpath from the road opposite the entrance to St y Nyll Farm.

Safety:



Comment: Uneven under foot. Low quarry faces appear relatively stable, but hard hats are recommended for anyone approaching the faces.

Conservation status:

There are no known conservation designations of this RIGS

OWNERSHIP/PLANNING CONTROL:

Owner/tenant: Unknown

Planning Authority: Vale of Glamorgan

Planning status/constraints/opportunities:

There are no known planning constraints or opportunities

CONDITION, USE & MANAGEMENT:

Present use: The site is unused at present and is left wild as a woodland.

Site condition: The site is partially overgrown

Potential threats: Unknown

Site Management: Site needs to be cleared of undergrowth in places for better access and view of the rocks

SITE DEVELOPMENT:

Potential use (general):

Potential use (educational): This site could be used to study this formation closely in relative safety. The quarry face sections are relatively low and appear to be stable, however hard hats are still recommended for anyone working near to the face.

Other comments:

Photographic Record







