



South Wales RIGS Group Site Record RIGS Description

SECTION A

General	South Wales
Site Name: Fernbank	File Number: Site_229_230_246_171
RIGS Number: 582	Surveyed by: Leanne Hughes
Grid Reference: SN 4840 0217	Date of Visit: 23 th October 2010
RIGS Category: Scientific, educational	Date Registered: Owner: Unknown Planning Authority: Carmarthenshire County Council
Earth Science Category: Stratigraphical, Sedimentological	
Site Nature: Disused quarries	Documentation prepared by: Leanne Hughes
Unitary Authority: Carmarthenshire County Council	Documentation last revised: 21 th December 2010
OS 1:50,000 Sheet: 159	Photographic Record: Attached
OS 1:25,000 Explorer Sheet: 178	
BGS 1:50,000: E229	
RIGS Statement of Interest:	
<p>Fernbank quarries have been suggested as a RIGS as they show the best exposure of Birthdir sandstone in the area. Two separate old quarries represent the largest and most easily accessible site for Birthdir sandstones, right next to the main road from Llanelli to Pen-y-Mynydd.</p> <p>The sandstones in this locality are a pale orange-yellow weathering to a pale orange-brown. They are predominantly coarse grained and display clear cross stratification laminated in places intermingled with fairly homogeneous sandstones. The unit dips locally to the south with an exposed surface of 3 x 5m² in the south quarry and 8 x 20m² in the north quarry.</p>	

Geological setting/context:

The roadside quarries are in a section of Brithdir sandstones which appear to have been used for local building stone. The unit here is approximately 80m thick. The Brithdir Beds outcrop extensively in this area of Wales as a belt which varies in thickness around 100m wide, extending from the south-west to Pontypool. The sandstones are overlain by thin shales and the Hughes Beds.

The whole sequence is of Westphalian age of the Lower Coal Measures group. The coal measures were formed in a large deltaic environment which experienced cycles of sudden subsidence causing marine flooding. Followed by a gradual 'muddying up' of the basin. These repeated cycles form the different units present such as the fluvial sandstones and swamp coal measures.

References:

SQUIRRELL, H C and DOWNING, R A. (1969) Geology of the South Wales Coalfield, Part I, the country around Newport (Mon), Memoir IGS sheet 249 (third edition)

STRAHAN, A, CANTRILL, T C, DIXON, E E L, THOMAS, H H, (1909) Geology of the South Wales Coalfield, Part X, the country around Carmarthen Memoir 229

SECTION B

PRACTICAL CONSIDERATIONS: Please score Accessibility and Safety Red Amber or Green			
Accessibility:			X
Comment: A short 200m walk North West from the junction of the Pwll road the quarries can be seen at the side of the main road.			
Safety:		X	
Comment: Quarry face appears stable if a little overgrown; the main road is very busy and has some blind corners.			
Conservation status: There are no known conservation designations of this RIGS			

OWNERSHIP/PLANNING CONTROL: Owner/tenant: Unknown Planning Authority: Carmarthenshire County Council Planning status/constraints/opportunities: There are no known planning constraints or opportunities
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CONDITION, USE & MANAGEMENT: Present use: Disused quarry Site condition: Overgrown Potential threats: Vegetation encroachment, road widening. Site Management: Vegetation clearance
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SITE DEVELOPMENT: Potential use (general): Educational site, building stones site. Potential use (educational): This site would serve as a useful example section of Brithdir
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Other comments:

Photographic Record

Insert photographs. Use separate sheet if required



