



## South Wales RIGS Group Site Record

### RIGS Description

**SECTION A**

General	South Wales
<b>Site Name:</b> Craig Llanishen	<b>File Number:</b> SITE_SWGA_CCC_313
<b>RIGS Number:</b> 681	<b>Surveyed by:</b> South Wales Geologists' Association
<b>Grid Reference:</b> ST 1715 8470	<b>Date of Visit:</b> 21st April 2009
<b>RIGS Category:</b> Scientific	<b>Date Registered:</b>
<b>Earth Science Category:</b> Stratigraphical	
<b>Site Nature:</b> Track Side Cutting	<b>Owner:</b> Cardiff County Council <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:</b> 171	<b>Documentation last revised:</b> 27th May 2009
<b>OS 1:25,000:</b> 151	<b>Photographic Record:</b> Attached
<b>BGS 1:50,000:</b> E249	
<p><b>RIGS Statement of Interest:</b></p> <p>This site has been nominated as a RIGS because it is a good example of the Quartz Conglomerate Group within the Cardiff district. The quartz conglomerate Group is predominantly a sandstone unit with lesser amounts of siltstones and quartz conglomerates. It is an example of a rock that was deposited in rivers with some evidence of restricted marine influence.</p> <p>Outcrop on east of track exposes red brown mudstones, sandstones and conglomerates of Upper Devonian Quartz Conglomerate Group, steeply dipping towards the north.</p>	

**Geological setting/context:**

"The Quartz Conglomerate Group is a locally pebbly multi-storey sandstone unit with subordinate siltstones and quartz conglomerates." Most of the group was deposited in a fluvial environment apart from locally where the highest parts of the sequence show evidence of restricted marine conditions.

The multi-story sandstone units exhibit planar lamination and cross beds, separated by erosion surfaces. Each multi-story unit is separated by thin siltstones or mudstones and above each erosion surface is a conglomeratic layer. These have a sandy matrix and some contain quartz pebbles.

The Quartz Conglomerate Group, in the Cardiff area, is interpreted as being deposited by low sinuosity streams. Little over-bank deposits are known.

Ref: Waters and Lawrence 1987

This outcrop is on the eastern side of track crossing crest of ridge of Craig Llanishen. Approx 70m south of gate in footpath next to pylon. Outcrop partly obscured by vegetation in summer. The main out crop is approximately 5m long and 3m high with further, smaller scattered outcrops extend south along the track.

Outcrop on east of track exposes red brown mudstones, sandstones and conglomerates of Upper Devonian Quartz Conglomerate Group. Steeply dipping north at 44°/328Mag, Two prominent joint surfaces cutting a sandstone unit show good haematised slickenside. Joint strike 314°.

Logged section from NW to SE:

Quartz Conglomerate 70cm

Red Mudstones 28cm

Sandstone 51cm (Slickensides)

Red Micaceous siltstones 28cm

Sandstone 38cm

Red Mudstone 43cm

Quartz Conglomerate 80cm (Cross bedded)

Red mudstone >15cm (Gap of approx 2m)

Small fault cuts the outcrop, displacing beds approx 15cm







Sandstone 43cm

Gap of 3m thin bedded sandstones 1m

**References:**

Waters RA, Lawrence DJD Geology of the South Wales Coalfield, Part III, the country around Cardiff 1987. BGS

**SECTION B**

<b>PRACTICAL CONSIDERATIONS:</b> Please score Accessibility and Safety Red Amber or Green			
<b>Accessibility:</b>			X 
Comment: Very easy access to outcrop in the side of a track. No vehicular access.			
<b>Safety:</b>			X 
Comment:			
<b>Conservation status:</b> There are no known conservation designations of this RIGS.			

<b>OWNERSHIP/PLANNING CONTROL:</b>	
<b>Owner/tenant:</b> Cardiff County Council.	
<b>Planning Authority:</b> Cardiff County Council.	
<b>Planning status/constraints/opportunities:</b>	

<b>CONDITION, USE &amp; MANAGEMENT:</b>
<b>Present use:</b> None. Banking to the East side of a track
<b>Site condition:</b> Good but slightly obscured by vegetation
<b>Potential threats:</b> Could become too overgrown
<b>Site Management:</b> Suggest that site is cleared of vegetation every few years

<b>SITE DEVELOPMENT:</b>
<b>Potential use (general):</b>
<b>Potential use (educational):</b> This is a good place to study the features typical of this formation

<b>Other comments:</b>
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General view of locality. View looking towards the east.



Cross bedding



Quartz Clasts in Conglomeratic Unit



Haematised Slikensides

*Photographs by Rhian Kendall*

**Annotated Sketch**

(as appropriate) Use separate sheet if required