



## South Wales RIGS Group Site Record RIGS Description

### SECTION A

| General  | South Wales   |
|--|---|
| <b>Site Name:</b><br>Rudry Iron Mine   | <b>File Number:</b><br>Site_249_252   |
| <b>RIGS Number:</b> 639  | <b>Surveyed by:</b><br>T Sharpe & J Hiscott   |
| <b>Grid Reference:</b><br>ST 2040 8644   | <b>Date of Visit:</b><br>5 <sup>th</sup> February 2010                                |
| <b>RIGS Category:</b><br>Scientific, historical  | <b>Date Registered:</b>   |
| <b>Earth Science Category:</b><br>Industrial, historical, mineralogical  | <b>Owner:</b> Unknown<br><b>Planning Authority:</b> Caerphilly County Borough Council |
| <b>Site Nature:</b><br>Disused mine adit   | <b>Documentation prepared by:</b><br>T Sharpe   |
| <b>Unitary Authority:</b><br>Caerphilly County Borough Council   | <b>Documentation last revised:</b><br>8 <sup>th</sup> September 2011                  |
| <b>OS 1:50,000 Sheet:</b> 171  | <b>Photographic Record:</b><br>Attached   |
| <b>OS 1:25,000 Explorer Sheet:</b> 152   |   |
| <b>BGS 1:50,000 Sheet:</b> 249   |   |
| <b>RIGS Statement of Interest:</b>   |   |
| <p>A small roadside outcrop downhill south of the Maenllwyd Inn in Rudry exposes rubbly beds of limestone near the base of the early Carboniferous Pembroke Limestone Group. The limestone is partly replaced by the red iron oxide mineral hematite which was worked as an ore here between about 1868 and 1875 as the Rudry Iron Mine. The entrance to a small adit can still be seen. Iron working in the Pembroke Limestone Group was common farther to the west in the area round Castell Coch and westwards to Garth and Llanharry. This is the most easterly occurrence of the iron mineralisation and working.</p> |   |

**Geological setting/context:**

Early Carboniferous Barry Harbour Limestone Formation (Pembroke Limestone Group, Blackrock Subgroup) here is locally replaced by hematite. The ore is located close to the base of the Barry Harbour Limestone and dips steeply northwards. Hematitic limestone with calcite veining is visible at the small, infilled adit within a 3m high outcrop of thin bedded limestones which extends westwards for 12 m from the adit. About 2,000 tons of ore yielding 40-50% iron ore were obtained between about 1868 and 1875 when the mine closed due to the steep dip of the ore body and drainage problems which were probably related to groundwater flow at the contact of the Barry Harbour Limestone with the underlying impermeable Cwmyniscoy Mudstone Formation of the Avon Group. A spring on the western side of the road here is situated at this stratigraphic contact. A level platform in the corner of the field belonging to Cwm Farm opposite the adit immediately to the west of the road was the site of some of the mine buildings and a shaft which has reopened through collapse several times in recent years.

This site is the most easterly occurrence of iron ore within the Pembroke Limestone Group

**References:**

ADAMS, W. 1870. The characteristics of the Cefn-On Tunnel. *Transactions of the Cardiff Naturalists' Society*, **2**, pp.32-41.

GAYER, R A & CRIDDLE, A J. 1969. Mineralogy and genesis of the Llanharry iron ore deposits, Glamorgan. *9<sup>th</sup> Commonwealth Mining and Metallurgical Congress, 1969. Mining and Petroleum Geology Section, Paper 15*, 22pp.

SIBLY, T F. 1919. *Memoirs of the Geological Survey. Special Reports on the Mineral Resources of Great Britain. Vol X. Iron ores (contd.). The haematites of the Forest of Dean and South Wales*. London: HMSO, iv + 93pp.

SQUIRRELL, H C. and DOWNING, R A. 1969. *Geology of the South Wales Coalfield, Part I, the country around Newport (Mon.). Explanation of One-inch Geological Sheet 249, New Series*. Third edition. London: HMSO, xiii + 333pp.

STRAHAN, A. 1899. *The geology of the South Wales Coalfield. Part I. The country around Newport. Memoirs of the Geological Survey of England and Wales, 249*. London: HMSO, vi + 97pp.

THOMAS, T M. 1961. *The mineral wealth of Wales and its exploitation*. Edinburgh: Oliver and Boyd, xv + 248pp.

VIVIAN, S. 1885. The hematite deposits of the southern outcrop of the Carboniferous Limestone of South Wales. *Proceedings of the South Wales Institute of Engineers*, **14**, pp.164-175, 211-215,

## SECTION B

### PRACTICAL CONSIDERATIONS:

Please score Accessibility and Safety Red Amber or Green

#### Accessibility:



Comment: The site is within a small copse of trees by the roadside immediately north of the minor road junction opposite Cwm Farm about 300 m south of the Maenllwyd Inn, Rudry.

#### Safety:



Comment: The site is a low cliff face with an infilled mine adit. When entering or leaving the site, beware of traffic on the road adjacent to the site.

#### Conservation status:

There are no known conservation designations of this RIGS

### OWNERSHIP/PLANNING CONTROL:

**Owner/tenant:** Unknown

**Planning Authority:** Caerphilly County Borough Council

#### Planning status/constraints/opportunities:

There are no known planning constraints or opportunities

### CONDITION, USE & MANAGEMENT:

**Present use:** disused mine adit

**Site condition:** Poor, overgrown.

**Potential threats:** Growth of vegetation obscuring the site

**Site Management:** Clearance of vegetation on and around exposure and adit.

### SITE DEVELOPMENT:

**Potential use (general):** The site is of value for academic study.

**Potential use (educational):**

### Other comments:

## Photographic Record



Site of Rudry Iron Mine adit, looking northwest. The adit is behind the tree in the centre of the picture.



View of adit of Rudry Iron Mine.



Hematitic limestone in the roof of the adit.