

# Cwmystwyth Lead Mine, Cwmystwyth, Ceredigion.

# Cultural Heritage & Archaeological Feasibility Study



By

Richard Scott Jones (BA, MA, MCIfA)

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HRSWales Report No: 207

# CULTURAL HERITAGE & ARCHAEOLOGICAL FEASIBILITY STUDY

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Prepared for:

The Coal Authority

On behalf of:

**Natural Resources Wales** 

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#### Non Technical Summary

Heritage Recording Services Wales (henceforth HRS Wales) were commissioned by the Coal Authority (CA) on behalf of Natural Resources Wales (NRW) to undertake an appraisal of the Cultural Heritage & Archaeology of the former Cwmystwyth Lead Mine, Cwmystwyth, Ceredigion (centred on OS grid reference SN 8038 7465), prior to proposed remediation works.

The study was undertaken in early March 2019 to offer preliminary information on the cultural heritage and archaeology of the study area, in order to raise awareness of any potential archaeological issues that may present themselves within the site and any other heritage constraints in the immediate and wider landscape that will need to be considered as part of any design and planning stage.

The feasibility study area is positioned within the Registered Historic Landscape of Uplands Ceredigion. The whole mine site is a scheduled monument with an extensive area and therefore any remediation proposals will be governed by scheduled monument consent, as such all features associated with the mine are high value heritage assets.

As well as being within a scheduled area, the site is also within a designated Special Protected Area (SPA), a Special Area of Conservation (SAC) and set within two Sites of Special Scientific Interest (SSSI).

The available literature, cartographic sources, the Historic Environment Record (HER) material in the National Monuments Record (NMR) and the site visit, have shown that the site is of enormous importance with significant extant remains, both above ground and below, that span over 4000 years of activity on the site, from the Bronze Age to the mid 20th Century.

The mine has a very rich history, being referenced as far back as the 13th and 14th century when the land was in the hands of the Cistercian Monastery at Strata Florida. Following the medieval period the mine, particularly Copa Hill, was the focus of intense mining by the Crown and following the passing of the Mines Royal Act in 1693, the mine was continually leased to the Company of Mine Adventurers with notable historic characters including William Waller, Sir Humphrey Mackworth and the Powell family of Nanteos. Other 18th and 19th Century historical figures include Chauncey Townsend, Thomas Bonsall, Thomas Pugh, John Taylor and Henry Gamman. Each of these historical figures and the developments they instigated on the mine are embedded in the landscape both above and below ground remains of the Cwmystwyth Mines today.

The below ground remains of the 17th - 20th century mine are very impressive and well preserved, as is evident from the explorations undertaken by mine explorers over the decades and in particular the Welsh Mine Preservation Trust. The underground features and artifacts are all too often forgotten generally as they are hidden from view and nigh on impossible to explore without proper equipment and training. However, these underground workings are exceptional heritage assets and as such consideration must also be given to their preservation and recording.

Given that the Cwmystwyth Mines and all of the features and structures within its area are High Value heritage assets, the protection and preservation of what extant remains there, will be a principal consideration in any future remediation design proposals. As such, any potential development will have to do its utmost to avoid any significant direct impact to any known surface and sub-surface remains. Because the site is positioned entirely within a designated area, then any remediation design proposals will have to be accompanied by a scheduled monument consent application, to include detailed plans and a full desk based assessment following consultation with Cadw.

Regarding the red line area immediately south of the main area of the mine, on the south side of the Ystwyth, this area is occupied by the remains of the South Cwmystwyth Mine that was started in the 1870s, but this venture was short-lived and was not successful. The surface remains at this site are fairly extensive in that they extend over a fairly large area with levels and banked linear features forming much of what remains. Unfortunately there are no standing structures at this mine. Further west are the runs of the deserted farmstead of Hen Parc. Although the remains of the South Cwmystwyth Mine and Hen Parc are not within the designated area, they are still very significant remains in terms of the history of the immediate area south of the Cwmystwyth Mine and they share a history with the Cwmystwyth Mine. Any proposed remediation development will have to do the utmost to avoid any significant direct impact to any known surface and sub-surface remains.

Further to the west of the mine, the area that could potentially be used to install a new pipeline and

treatment works, the assessment has shown that much of the area immediately west of Bwlch-y-gwyn and Penparc was used as part of the Pentre Mine, with the remains of levels and a waste tip. Further west still are the remains of a series of boundary banks and a mill race at Pentre Mill. All of these features are Medium Value sites. However, the history of the Pentre Mine is believed to go back to the 17th century and as such the significance of the Pentre Mine features should be considered carefully in any remediation design.

The far east end of the red line area is occupied by the dwellings of Nant Watcyn and Ty'n-y-ddol and a series of field banks. None of these sites are within the designated area and are Medium Value sites. However, although all of the surface remains are marked on the early tithe map of 1848 and the later OS maps of 1187 and 1906, because of the excavation of a Bronze Age grave complete with a gold artifact found in the 1990s there is always a chance that other buried remains are present in the area below Graig Fawr.

Within the wider 1.5 Km study area the study recorded the locations of only five (5) Grade II listed buildings, but none are positioned within the red line boundary, the closest listed building being positioned approximately 150m north of the westernmost end of the red line area.

Other than the Cwmystwyth Mine itself, the only other nearest Scheduled Monument is a Chain Bridge and Gothic Arcade (CD172) at the east end of the Hafod Estate, which is a Registered Park & Garden which itself is positioned 1.2 Km west of the red line area.

In terms of potential direct impacts, it is predicted that any proposed remediation work that involves penetrative groundwork of any kind within the designated area of the mine complex will require Scheduled Monument Consent, given that any work in the designated area will have a direct impact on known and unknown sub-surface archaeological remains, features and deposits that are of National importance. As such any remediation design will need to carefully consider the location of known mining features and structures as well as consider the possibility that there could very well be buried remains associated with the mine or other earlier features. It will also have to consider avoiding damage to any existing spoil heaps of any period. Any proposed planning application will need to be accompanied by detailed plans and reports describing the proposals including a full desk based assessment detailing any predicted impacts along with mitigation proposals and justifications for the proposals along with a series of alternative designs in accordance with Scheduled Monument Consent.

Considering the prehistoric, historic and archeological character and nature of the designated area and the immediate surrounding landscape, the chances of significant archaeological remains becoming exposed from any groundwork within the red line area is considered to be high.

Once Scheduled Monument Consent (SMC) or SMC and planning permission has been granted, any conditions will require that some form of archaeological mitigation is in place prior to or during the commencement of the proposed works, This may take the form of a detailed site survey of the mine complex and/or a program of detailed building recording to Level 4 equivalent, prior to any areas where remediation works are to be undertaken. Close consultation with Cadw, the Dyfed Archaeological Trust - Heritage Management, the Cambrian Mines Trust, the Welsh Mines Preservation Trust, National Resources Wales and Ceredigion County Council will need to be continually maintained.

A full desk based assessment as part of an EIA will need to be undertaken once a suitable remediation design has been approved, in order to assess the full impact of any proposals. As part of this study an Assessment of Significance of Impact of Development on Historic Landscape (ASIDOHL2) may also need to be undertaken. This ASIDOHL2 will have to assess the potential impact on the Uplands Ceredigion registered landscape taking into account all High Value and Medium value sites. However, this will depend on the scale and design of any remediation proposals and Cadw and the Dyfed Archaeological Trust - Heritage Management section, will need to be consulted.

The desk based assessment will also have to consider all undesignated sites south of the mine and all those to the west in the area of the Pentre Mine etc. This will entail a walkover survey of the red line area (WEST) following remediation design.

As well as the potential direct impact on any known and unknown undesignated sites within the red line study area, depending on the scale and design of the proposed remediation works, there may also be a number of potential in-direct effects on the setting of the Cwmystwyth Mine as a whole as well as individual standing structures, adits and shafts etc. within it.

In view of the proximity of the potential development works to designated and undesignated sites, any large scale proposals may have a significant In-direct effect on their setting. As well, any proposed development may also have a significant indirect effect on the Registered Historic Landscape of Uplands Ceredigion and as such there may be a need to undertake an Assessment of Significance of Impact of Development on Historic Landscape (ASIDOHL2). A guide to good practice on using the Register of Landscapes of Historic Interest in Wales in the planning and development process was published in 2007 by Cadw, Countryside Council for Wales (now Natural Resources Wales) and the Welsh Assembly Government. Whether or not an ASIDOHL2 will be required or not will depend on the scale and design of any remediation proposals and the Dyfed Archaeological Trust - Heritage Management section and Cadw will need to be consulted.

As well, in view of the proximity of the potential development works to the designated Registered Park & Garden (RPG) of Hafod, any large scale proposals may have a significant In-direct effect on its setting. Therefore this RPG will also have to be considered within any future EIA.

Since the purchase of the land from the Crown Estate by the Cambrian Mines Trust in 2013 the Dyfed Archaeological Trust Services (DATs) have drawn up a Management and Protection Plan for the Cwmystwyth Mine for the Cambrian Mines Trust. A series of short term important works have been proposed by the Cambrian Mines Trust. These include the erection of signage and information panels, improved parking and footpaths, management of water courses to prevent erosion and reduce pollution, the consolidation and repair of a number of adit frontals (Level Fawr and Taylor's Level) and the management and improvement of access to below grounds for research and recording.

The CMT's Long term sustainability and management at the site includes: the development of a hydroelectric scheme at the site in a similar position to the former hydro works used at the site over 100 years ago during the time of John Taylor; further remediation and consolidation of mining structures at the site, above and below ground, and; the continued promotion and education of visitors to the site.

In accordance with Planning Policy Wales (2018), given the extremely rich history and prehistoric origins of the Cwmystwyth Mines, there is a great opportunity as part of the remediation process to help further promote a sense of place and identity and as a result help to add and promote regional and local distinctiveness by utilising the remains of the mine as an educational, economic and social asset in conjunction with Cadw, Natural Resources Wales, Ceredigion County Council, the Welsh Mines Preservation Trust and the Cambrian Mines Trust. As well as helping to preserve and protect this exceptional site for the Nation, the continued promotion and education of the site should play a crucial role in any future conservation and management plan.

#### 1. Introduction

#### 1.1 Survey Brief

- 1.2 Heritage Recording Services Wales (henceforth HRS Wales) were commissioned by the Coal Authority (CA) to provide an appraisal of the Cultural Heritage & Archaeology relating to a potential mine water pollution mitigation scheme at the designated Cwmystwyth Metal Mine, Cwmystwyth, Ceredigion (centred on OS grid reference SN 8038 7465) This work is being undertaken on behalf of Natural Resources Wales (NRW) as part of a wider programme of metal mine legacy assessments and mitigation proposals.
- 1.3 The intention of this report is to provide a record of the work undertaken by HRS Wales which will in turn contribute to the baseline data gathering for this Site. The report will also provide a basis for the conceptual design and feasibility and practicability assessment of any proposed mitigation scheme (as appropriate to the nature of the specialist input provided). The report also identifies the likely next steps in the assessment process if the Site were to progress beyond the current feasibility stage and identifies opportunities to directly contribute to the sustainable management of natural resources in Wales as detailed in the Environment (Wales) Act 2015 and the Wellbeing of future generations (Wales) Act 2015. It is understood that the feasibility report for this Site will be produced after the submission of this report to the CA and that dialogue with those undertaking the feasibility studies may continue after report submission. A summary of findings from this report (and any subsequent discussions) will be incorporated in the feasibility report document; it is also intended that this report will be appended in full to the final feasibility report.
- 1.4 This report is not intended as an impact assessment and it should be noted that further more detailed survey and assessment is likely to be required for any scheme that goes forward to detailed design, planning and construction.

#### **Site Location and Description** (see Figures 1 - 8)

- The designated Cwmystwyth Metal Mine (NPRN: 115 / PRN: 5461 / SM: CD145) is located 2.1 approximately 22Km southeast of Aberystwyth and 6km northeast of the village of Pont-rhyd-ygroes. The extensive mine covers around 250ha on the steep northern slopes of the Ystwyth Valley, with some minor workings on the southern slopes. Cwmystwyth exploited three mineral lodes over the course of its operation, namely Comet, Kingside and Mitchell. The northern slopes are cut by four watercourses, the Nant y Gwaith, the Nant y Graig, the Nant y Watcyn and the Nant yr Onen. Work at the Cwmystwyth Mines can be dated back as far as the Bronze Age (c.2300 BC - c.800 BC), and continued intermittently over many centuries until all activity finally ceased in around 1939 and was later abandoned in 1950. The visible features within the scheduled area include numerous shaft and adit entrances, areas of opencast working, vast waste dumps, water-management and transport systems, extraction and dressing processes with their power systems, as well as remains of office and residential buildings, garden plots and even an early 20th-century tennis court. The mines consist of four distinct areas which were sometimes worked as separate undertakings and sometimes combined. Working from west to east these are Pugh's Mine, the Kingside Mine, Penguelan Mine, and Copa Hill, which can be subdivided into the prehistoric opencast on the Comet Lode together with the tips to the west of it, and the remainder.
- 2.2 Cwmystwyth Mine lies within the Registered Historic Landscape of Uplands Ceredigion, the *Elenydd* Special Area of Conservation (SAC) & Site of Special Scientific Interest (SSSI), and the *Elenydd-Mallaen* Special Protection Area (SPA). Much of the site itself has been designated as a Scheduled Monument (SM: CD145), with 14ha also designated as a Site of Special Scientific Interest (SSSI) (*Mwyngloddfa Cwmystwyth*).
- 2.3 Cwmystwyth is a hydrologically complex site, with mining activity having had a significant impact on the natural regime. The River Ystwyth receives all surface and sub-surface drainage from the mine, causing it to fail European Water Framework Directive (WFD) standards for zinc, lead and cadmium. The subsurface workings are drained via Pugh's, Gill's Lower and Kingside adits. Pugh's Adit is the largest point source of metals from the site, whilst Gill's Lower and Kingside are collapsed and emerge as small upwellings. There are also numerous other minor upwellings of

contaminated groundwater. A number of streams draining the plateau high above Cwmystwyth flow down through the site, eroding and mobilising heavy metals from the extensive waste tips. These include the Nant y Gwaith, Nant y Graig, Nant Watcyn and Nant yr Onnen. These watercourses are often lost to ground as they pass through the site, making flow monitoring and determination of metal loads challenging. Mine drainage is also influenced by the large Ystwyth Fault which runs in an east-northeast to west-southwest trend, bisecting the River Ystwyth. It is thought that contaminated groundwater from the sub-surface workings discharges directly into the river through the fault zone.

- 2.4 In 2013 the Cambrian Mines Trust obtained ownership of Cwmystwyth Mine from the Crown Estate with the aim of securing the preservation, restoration and improvement of the site for public benefit. Today from the public highway, the surface workings of the Cwmystwyth Mine are dominated by extensive spoil heaps, several ruinous structures, including the remains of the former dressing mill floor, compressor house foundations, mine offices and crusher house and more, and lengths of leat, shafts, levels and adits. Since the Cambrian Mines Trust obtained the mine, significant structures have been protected by fencing.
- 2.5 The area of this study (red line) is divided into two parts, the former main mine complex covering 50.73 hectares to the east and a potential remediation development area to the west, which covers an area of 16.30 hectares.

#### **Designations** (see Figures 9 - 15 and 40-41)

- 2.6 The Cwmystwyth Metal Mine is located within the Registered Historic Landscape (RHL) of Uplands Ceredigion and lies directly within the Historic Character Area (HCA) of the Cwmystwyth Metals Mines (HCA 16) which is also bordered to the southeast by the Upper Ystwyth Valley (HCA 70), the Cambrian Mountains (HCA 15 to the north and south, and Pwllpeiran (HCA 46) to the west.
- 2.7 The Cwmystwyth Metal Mine is a designated Scheduled Monument (CD145) with an area that covers 96.31 hectares. It was scheduled in 1985 as being of national importance for its potential to enhance and illustrate our knowledge and understanding of mining technology from a variety of periods. The scheduled area covers the entire northern slope of the mine complex on the northern side of the public road and a small area on the southern side of the public road. It also includes the opencast area of Graig Fawr and the south-eastern region of Copa Hill. There are no further Scheduled Monuments within the red line study area. However, within the wider 1.5Km landscape view there is also one further Scheduled Monument, a *Chain Bridge and Gothic Arcade* (CD172) positioned at the east end of the Hafod Estate, some 1.3Km from the eastern red line study area.
- 2.8 There are no listed buildings within the red line study area. However within the wider landscape study area (1.5Km) there are five (5) Grade II Listed Buildings The closest listed building to the red line boundary is the cottage known as *Briwnant Cottage* (LB No. 84249), which is positioned on the north side of the B4574 in Cwmystwyth village some 100m NW of Pentre Farm. just north of the far western part of the red line study area.
- As well as the above designations, the Cwmystwyth Mine is also positioned within the *Elenydd* Special Area of Conservation (SAC) & Site of Special Scientific Interest (SSSI), and the *Elenydd-Mallaen* Special Protection Area (SPA). A further small SSSI *Mwyngloddfa Cwmystwyth* is also positioned with the *Elenydd* SSSI, covering only 14 hectares. Within the western red line area there is also one small area of semi-ancient woodland.
- 2.10 There are no Registered Parks and Gardens (RPGs) within the red line study areas. However, within the wider 1.5Km landscape toward the far west is the RPG of the *Hafod Estate* (PGW (Dy) 50(CER)), with essential settings at its eastern end with views looking toward the Ystwyth Valley.
- 2.11 There are no registered battlefield sites within the red line boundary of the site or within the immediate wider landscape.

#### Geology of Cwmystwyth (see Figure 16)

- 2.12 The geology of the site has been reviewed with reference to the British Geological Survey (BGS) 1:50,000 Sheet 179, "Rhayader", the British Mining Volume No.17 published by the Northern Mining Research Society (HUGHES 1981) and OT Jones's 1922 geological report. These indicate that the site is situated within turbiditic sandstones of the Llyn Teifi Member, at the base of the Cymystwyth Grits Group, more recently named the Upper Llandovery Series, of Silurian age. The mine is situated within a broad syncline within these strata, which has an axis trending approximately north-south. The geology of the site is illustrated in Figure 16.
- 2.13 The main geological feature in the vicinity of the mine is the Ystwyth Fault, which comprises a 30 m wide brecciated (fractured) zone that runs sub-parallel with the Afon Ystwyth, as shown on Figure 16. Mining records indicate the faulted zone to be partially filled with glacial gravel and blue clay, which is the cause of stability problems in a number of the underground workings. Mine exploration information suggests that the upper 100 ft (30 m) contains permeable material (gravel), whilst below this the fault zone is comprised of fault breccia with a clay matrix.
- 2.14 Several smaller, sub parallel faults are present to the north and south of the Ystwyth Fault, which are not shown on the published BGS mapping. Local mining plans indicate two additional faults crossing perpendicular to the main fault, and intersecting the Ystwyth Fault at the confluence of the River Ystwyth and the Nant y Graig.
- 2.15 Lead (galena) and zinc (sphalerite) were the main ores extracted over the life of the mine. Both early (A1) and late (A2) phases of mineralization are well displayed at the site. A1 mineralization is represented by various quartz-sphalerite-galenachalcopyrite- dolomite breccias, whilst A2 mineralization is represented by a sphalerite-galena-quartz-calcite-pyrite assemblage.
- 2.16 Three principal lodes were worked throughout the sites history; the southwards dipping Kingside and Comet Lodes, and the northwards dipping Mitchell's Lode.
- 2.17 Lead occurred in all the veins (as galena lead sulphide), and this was the principal ore extracted, at least until 1884 when it was superseded by the production of zinc (or blende zinc sulphide). Small amounts of copper ore (chalcopyrite) have been extracted at various times (particularly from the eastern end of the Comet Lode ('Belshazzar' or Copper Lode) on Copa Hill), although no production of this mineral has been recorded since 1800. Compared to the mines to the north of the Rheidol, the lead ore from Cwmystwyth appears to have been silver-poor, although some 33,509 ozs of silver metal were nevertheless recorded as having been obtained between 1848 and 1916 (this suggests an average content of 3.3 ozs silver per ton of lead ore). The total *recorded* output for lead since 1848 is only 32,913 tons, and for zinc ore 19,913 tons, thus it would appear that the mine was already exhausted by this time. However, the large area of shallow workings, including those on Copa Hill and the rich ore 'pipe' worked as an opencast on the Graig Fawr, at the junction of the Kingside and Comet Lodes, attests to the large volume of lead ore removed prior to the 19th century and the advent of deep mining (HUGHES 1981).

#### 3 Background

#### 3.1 Rational

- 3.2 In order to design a suitable treatment system NRW are seeking a methodology to compile a longer term metal mines remediation programme across Wales as a whole. The programme will identify potential annual progression of sites towards remediation over the next fifteen years, incorporating checks at critical decision points to ensure only sites which are technically feasible and pass cost benefit assessments progress. As a result of this remediation programme, a feasibility study of the Cwmystwyth Metal Mine was required and the Cultural Heritage and Archaeology of the mine will play an important role in any decision and design making processes for the proposed remediation works.
- 3.3 In 2006 NRW commissioned Parsons Brinkerhoff Ltd to carry out a feasibility study into remedial design at Cwmystwyth. This study identified potential options for remediation, and recommended further monitoring to improve understanding of the hydraulic system. In 2007 Atkins Ltd carried

out a programme of detailed monitoring on behalf of NRW. This report recommended producing an updated feasibility report focusing on the point sources from Pugh's & Gill's Lower adits, and the diffuse pollution from the waste tips along the Nant y Gwaith, Nant y Graig, Nant Watcyn and Nant yr Onnen. It also recommended continued monitoring to validate previous data and to ensure that any treatment design works are suitable. NRW carried out further water quality and flow monitoring between 2009 and 2012, including an MSc water quality modelling project on the Ystwyth catchment in 2012. This identified Pugh's Adit as the second biggest discharge of zinc in the Ystwyth catchment after the Frongoch Adit.

- In 2013 the Cambrian Mines Trust obtained ownership of Cwmystwyth Mine from the Crown Estate with the aim of securing the preservation, restoration and improvement of the site for public benefit. NRW are discussing ways in which we can work together to reduce pollution from the mine whilst preserving its heritage value for future generations. This includes reducing erosion of the waste tips along the Nant y Gwaith and the treatment of the adit discharges using passive technologies. We have calculated the size of a Vertical Flow Pond (VFP) passive treatment system required to treat the combined discharges from Pugh's and Gill's Lower adits, and in 2014 commissioned CH2M Hill Ltd to assess the availability of land to construct such a treatment system.
- 3.5 In 2015 C-Cure Solutions undertook site investigations, including spoil analysis and detailed aerial imagery with an Unmanned Aerial Vehicle (UAV). The images were used to create an erosion model, which estimated an average erosion rate across the site of approximately 20 tonnes ha-1yr-1, and in areas of very high erosion this increased to 125 tonnes ha-1yr-1. Laboratory trials were also carried out to assess the effect of amending mine spoil with C-Cure biochar. This was successful in reducing metal leaching from the spoil, in some cases by up to 100%, and resulted in good plant establishment of rye grass with biomass increasing by up to 40%.
- 3.6 In 2016 the Coal Authority reviewed all available information on a number of the most polluting metal mines across Wales, including Cwmystwyth, and identified preferred sites for one or more remediation schemes.

#### 3.7 Benefits of Remediation Works

- Over 20 tonnes of harmful metals could be prevented from entering the River Ystwyth and subsequently the Cardigan Bay Special Area of Conservation each year.
- The receiving and downstream water body will be more likely to achieve Good Ecological Status, although there are other mining pressures on these water bodies that will also need to be addressed.
- Reduced contaminated sediment load to the River Ystwyth.
- Potential to develop partnerships with important stakeholders, including the Cambrian Mines Trust.
- Potential to develop an educational resource at the site, demonstrating passive treatment technologies.

# 4 Methodology

#### 4.1 Aims & Objectives

4.2 The aim of the feasibility study was to undertake a preliminary desk based survey in order to gain background information about the known or potential archaeological resource within the given area of the site and to provide preliminary information on all Historic Environment Record (HER) sites and other designated sites within a 1.5 Km radius from the edge of the red line study area, in order to inform design proposals for proposed remediation work, as well as to formulate and offer potential archaeological mitigation strategies in the event that any proposed remediation design may have an impact on known heritage assets.

- 4.3 Given that nearby to the mine are cycle footpaths, including the Borth to Devil's Bridge to Pontrhydfendigaid Trail, and bridleways, there are also many potential benefits and opportunities for regeneration and promotion of mining heritage in the Ystwyth Valley. These benefits and opportunities will also be considered in this study. The study will also give adequate consideration to the impact of any potential operational procedures at the site, in particular access for heavy machinery and timings of works.
- 4.4 The key objective of the feasibility study is to explore and consider the historic environment dimension in order to inform any future remedial development and planning proposals.

#### 4.5 Sources Consulted

- 4.6 The following sources were consulted as part of the study:
  - Dyfed Archaeological Trust (DAT) HER
  - RCAHMW National Archive, Aberystwyth
  - National Library of Wales (NLW), Aberystwyth
  - Cadw Scheduled Monument (SM) listings, Listed Buildings, Registered Parks and Gardens, Registered Historic Landscapes;
  - Ceredigion County Council Conservation Areas.
- 4.7 The following cartographic sources were included in the study:
  - William Waller's map of 1704
  - OS Surveyors drawing 1820
  - Llanfihangel y Creuddyn parish Tithe Map and apportionment details(1847)
  - Gwnnws parish Tithe Map and apportionment details(1847)
  - Ordnance Survey 1<sup>st</sup> Edition map of 1887 (1:10560);
  - Ordnance Survey 2<sup>nd</sup> Edition map of 1906 (1:10560);
  - Ordnance 1953 (1:10560);

#### 4.8 Other sources Consulted

- Local libraries
- Key source literature including: David Bick's Old Metals Mines of Mid-Wales (1975); Simon Hughes's The Cwmystwyth Mines (1981); Simon Timberlake's Excavations on Copa Hill, Cwmystwyth (1986-1999): An Early Bronze Age Copper Mine within the uplands of Central Wales; OT Jones' Lead & Zinc Vol XX Special Reports on Mineral Resources (1921)
- Other source literature

#### 4.9 Survey Limitations

4.10 This preliminary survey is not intended to provide a comprehensive assessment of the archaeological resource directly within and immediately outside of the proposed red line study area, but purely offers some readily available primary background information in order to inform remediation design as well as to evaluate the depth and dimension of any possible future full desk based assessment and site walkover, which will have to be undertaken in order to fully comprehend the merit of the heritage resource and the potential direct and indirect effects of the proposal on designated and undesignated sites and other potential mitigation strategies that may arise, such a site survey, a program of building recording or an archaeological watching brief in accordance with any granted scheduled monument consent and planning application.

# 5 Planning Policy Context & Legislation

- 5.1 **Planning Policy Wales** (Edition 10 December 2018)
- 5.2 The Distinctive and Natural Places theme of planning policy topics covers historic environment, landscape, biodiversity and habitats, coastal characteristics, air quality, soundscape, water services, flooding and other environmental (surface and sub-surface) risks.
- 5.3 The special and unique characteristics and intrinsic qualities of the natural and built environment must be protected in their own right, for historic, scenic, aesthetic and nature conservation reasons. These features give places their unique identity and distinctiveness and provide for cultural experiences and healthy lifestyles.
- As well as those characteristics regarded as special or unique there are other, environmental qualities of places which are ubiquitous. Environmental components of places, such as clean air, access to open spaces and water quality, are linked to the quality of the built and natural environment. The environmental components of places influence and shape health and wellbeing as well as playing a role in sustaining and creating places which are adaptable and resilient to change. Distinctive and Natural places must maintain or incorporate green infrastructure, recognising the wide ranging role it can play, as key components of their natural and built fabric. Doing so will maximise health and well-being of communities and the environment (PPW Chpt 6: Distinctive and Natural Placemaking and Well-being).
- 5.5 The Historic Environment
- The historic environment comprises all the surviving physical elements of previous human activity and illustrates how past generations have shaped the world around us. It is central to Wales's culture and its character, whilst contributing to our sense of place and identity. It enhances our quality of life, adds to regional and local distinctiveness and is an important economic and social asset.
- 5.7 The historic environment is made up of individual historic features which are collectively known as historic assets. Examples of what can constitute an historic asset include:
  - Listed buildings:
  - Conservation areas:
  - Historic assets of special local interest;
  - Historic parks and gardens;
  - Townscapes100;
  - Historic Landscapes;
  - World Heritage Sites; and
  - Archaeological remains (including scheduled monuments).
- 5.8 The ways in which historic assets are identified can vary. The most important historic assets often have statutory protection or are included in formal registers which identify them as being of special historic interest. Other assets yet to be formally identified could include buried archaeological remains.

#### 5.9 Ancient Monuments and Archaeological Areas Act 1979

5.10 Under the Ancient Monuments and Archaeological Areas Act 1979, the Welsh Assembly Government and Cadw are required to compile and maintain a Schedule of monuments considered to be of national importance. The statutory consent of Cadw is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Ancient Monument (SAM). In addition, impacts of development works upon the setting of a SAM form an important consideration in the granting or refusal of planning consent to conduct development works. The entire northern slope of the Cwmystwyth Mine and of the red line study area is a Scheduled Ancient Monument (CD145) within the red line study area. Within the 1.5Km wider landscape study area there is one Scheduled Monument, a post medieval feature attached to the Hafod Estate (CD172). Any development proposed within the scheduled area will require Scheduled

Monument Consent (for details see Section 6.1.

#### 5.11 Town and Country Planning Act 1990

5.12 Other known sites of archaeological/heritage significance can be entered onto county-based Sites and Monuments Records (now called Historic Environment Records) under the 1990 Town and Country Planning Act. Historic hedgerows are protected under the Hedgerow Regulations 1997. A hedgerow is historic if it marks a parish or township boundary which pre-dates 1850 AD, incorporates an archaeological feature or is part of or incorporates an archaeological site, marks the boundary of (or is associated with) an estate or manor which predates 1600 AD or forms an integrated part of a pre-parliamentary enclosure.

#### 5.13 Planning (Listed Building and Conservation Areas) Act 1990

- 5.14 Under the Welsh Office Circular 61/96, 'Planning and the Historic Environment: Historic Buildings and Conservation Areas' and the 'Planning (Listed Buildings and Conservation Areas) Act 1990 and the Historic Buildings and ancient Monuments Act of 1953, listed buildings are categorised as Grades I and II in decreasing order of special architectural and historic importance. These buildings are of acknowledged importance to the nation's built heritage. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires planning decision makers to have special regard to the desirability of preserving listed buildings, their settings or any features of special architectural or historic interest which they possess. There are no Listed Buildings within the red line study area. However, within the wider landscape study area there five (5) listed buildings. All of these are Grade II Listed.
- 5.15 Conservation Areas may be designated under the Planning (Listed Buildings and Conservation Areas) Act 1990. Section 72 of the 1990 Act requires decision makers on applications for planning consents to pay special attention to the desirability of preserving or enhancing the character or appearance of the area. As a matter of policy, planning decision makers must take into account the potential effects of development on the setting of Conservation Areas. There are no Conservation Areas within the study area.

#### 5.16 Historic Landscapes

- 5.17 The Welsh Government seeks to protect areas on the register of historic landscapes in Wales. The Cwmystwyth Mines are positioned within the Registered Historic Landscape (RHL) of *Uplands Ceredigion*.
- Planning authorities should protect those assets included on the register of historic landscapes in Wales. As above, the sharing and use of evidence and assessments undertaken for wider reasons, such as Green Infrastructure Assessments, should be used to identify and better understand historic landscapes and ensure their qualities are protected and enhanced. The register should be taken into account in decision making when considering the implications of developments which meet the criteria for Environmental Impact Assessment or, if on call in, in the opinion of the Welsh Ministers, the development is of a sufficient scale to have more than a local impact on the historic landscape. An assessment of development on a historic landscape may be required if it is proposed within a registered historic landscape or its setting and there is potential for conflict with development plan policy.

#### 5.19 Archaeological Remains

- 5.20 The planning system recognises the need to conserve archaeological remains. The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not.
- 5.21 Where nationally important archaeological remains are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in a direct adverse impact on a scheduled monument (or an archaeological site shown to be of national importance).
- 5.22 In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.
- 5.23 Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment

- and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains. The needs of archaeology and development may be reconciled, and potential conflict very much reduced, through early discussion and assessment.
- If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository. On occasions, unforeseen archaeological remains may still be discovered during the course of a development. A written scheme of investigation should consider how to react to such circumstances or it can be covered through an appropriate condition for a watching brief. Where remains discovered are deemed to be of national importance, the Welsh Ministers have the power to schedule the site and in such circumstances scheduled monument consent must be required before works can continue.

#### 5.25 Conservation of Habitats and Species Regulations 2010

- 5.26 The Cwmystwyth Mines are positioned within the *Elenydd* Special Area of Conservation (SAC). The *Elenydd* SAC (reference UK0012928) is an expansive area covering parts of Ceredigion and Powys covering almost 86.09 square kilometres (CCW 2008, revised 2013). The Cambrian Mines Trust owned area lies entirely within the designated SAC area excluding a small part on its southwestern side (south of the road) (Figure 4). The SAC is a European designation and defined in article 1.1 as:
- 5.27 "special area of conservation means a site of Community importance designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated".
- 5.28 The Elenydd area has been designated as an SAC as it contains habitats that are rare or threatened within a European context. The priority habitat features of the SAC include the following Annexe I Habitats (most significant): Blanket Bogs (EU Habitat Code 7130), Calaminarian grasslands (EU Habitat Code 6130), European dry heaths (EU Habitat Code 4030), Oligotrophic to mesotrophic standing waters of the Isoeto- Nanojuncetea (EU Habitat Code 3130), Floating waterplantain Luronium natans (EU Habitat Code 1831).
- 5.29 The full legal measures to protect SAC areas are laid out within the 'Conservation of Habitats and Species Regulations 2010'. This includes legislation for the protection of the designated habitats, as well as any protected species of flora or fauna within those. This would apply to the various rare plants and lichens that are present at the site, breeding birds, bats and any other protected mammals and invertebrates that may be present at the site. The relevant protected species are listed in Schedule 8 of the 2010 regulations.
- 5.30 It is also noted that almost all SAC areas lie within Sites of Special Scientific Interest (SSSI). For each of the SSSIs a list of operations is included which could damage the site and for which consents must be obtained. A list of the activities relevant to the Cwmystwyth Mines site is included in the SSSI section below. SSSI consents are obtained from Natural Resources Wales (NRW).
- 5.31 Where any proposed activities will require planning permission then the local authority will require assessments of the impacts of the work on the SAC or elements/species therein to be prepared. The local authority will also consult with NRW to ensure the assessment is appropriate and that the proposed activities will not adversely affect the integrity of the SAC. Conditions or restrictions to any such consents may also be applied to ensure the protection of the SAC. Any such consents will be monitored by either or both the local authority and NRW to ensure compliance throughout.
- 5.32 Any planning permission granted for activities within a SAC (once consents have been obtained) will also have environmental planning conditions placed upon it.
- 5.33 As well as being positioned within a SAC, the Cwmystwyth Mines are also positioned within the Special Protected Area (SPA) of *Elenydd–Mallaen*. A Special Protection Area is one designated for the protection of rare and vulnerable birds (in a European wide context) and for regularly migratory species (CCW 1993). The *Elenydd–Mallaen* SPA covers an area of 300.22 square kilometres

which encompasses almost all of the CMT owned land, excluding the lower River Valley and the main area of the mines site (around the mill).

- 5.34 There are three Annex I birds recorded as nesting within the SPA area:
  - Merlin (Falco columbarius)
  - Peregrine Falcon (Falco peregrinus)
  - Red Kite (Milvus milvus)
- 5.35 All of these birds have been recorded within the Cwmystwyth Mines site, although not all have been confirmed as breeding within the area.
- 5.36 As with the SAC, the full legal measures of protection for the SPA are laid out within the 'Conservation of Habitats and Species Regulations 2010'. The SPA designation reinforces that the species therein are protected in a European wide context.
- 5.37 Again, the inland SPA areas all lie within Sites of Special Scientific Interest (SSSI) and the consents and regulations applicable for the SSSI are the same as for the SPA.
- 5.38 Where any proposed activities could impact upon the SPA (whether requiring planning permission or otherwise) an appropriate assessment of the impacts of the work will need to be prepared and approved by the local authority and NRW. The assessment will need to demonstrate that the proposals will not have an impact upon the special European wildlife interest of a SPA to proceed. Conditions or restrictions to any such consents may also be applied to ensure the protection of the SPA. Any such consents will be monitored by either or both the local authority and NRW to ensure compliance throughout.
- 5.39 Any planning permission granted for activities within a SPA (once consents have been obtained) will also have environmental planning conditions placed upon it.
- 5.40 As well as the SAC and SPA designations, the Cwmystwyth mines is also positioned within the Elenydd Site of Special Scientific Interest (SSSI) which covers an area of 227.7 square kilometers. Within the Elenydd SSSI is the much smaller *Mwyngloddfa Cwmystwyth* SSSI covering an area of 0.14 square kilometers. The Elenydd SSSI contains the Elenydd SAC and the majority of the Elenydd–Mallaen SPA. The citation for the Elenydd SSSI designation includes both habitats and species as covered by the Elenydd SAC and Elenydd-Mallaen SPA (Calaminarian grasslands, blanket bogs, raptors etc). In terms of bird species the SSSI citation includes numerous other birds, including raven, buzzard, hen harrier and short eared owl.
- 5.41 For the SSSI the following aspects are directly relevant to the Cwmystwyth mines site:
  - Blanket bogs (on the upland area)
  - Dry heathlands
  - Calaminarian grasslands (metal tolerant / lichen rich grasses)
  - Floating water plantain (in reservoirs on upland areas)
  - Rare lead moss
  - Lichens
  - · Geological formations
  - Bats
  - Vascular plant assemblage
  - Forked spleenwort Asplenium septentrionale
  - · Breeding bird assemblage of upland moorland
- 5.42 The *Mwyngloddfa Cwmystwyth* SSSI citation includes both geological and biological features. The mineralogy of the site includes the mineral lodes running through the area and their formation.

- 5.43 For this SSSI the following is directly relevant to the Cwmystwyth mines site are:
  - Calaminarian grasslands
  - Rare lead moss
  - Lichens
  - Geological formations
  - Bats
- 5.44 The 'Conservation of Habitats and Species Regulations 2010' is again applicable to the SSSI area. For the *Mwyngloddfa Cwmystwyth* SSSI bats are specifically mentioned in the citation, which are all protected species.
- As noted above for both the SAC and SPA areas, a list of operations that may damage the features of interest is given for each of the SSSIs. Before any of the operations on the list (see below) are undertaken NRW must be consulted and consents applied for. Where consents are granted they are usually accompanied by conditions which need to be adhered to ensure the proposed works do not impact on the integrity of the SSSI.
- 5.46 Where planning permission is needed for works within a SSSI, the local authority will seek the advice of NRW in advance of any determination of an application. Appropriate assessments may be needed to demonstrate that the proposed works will not impact upon the integrity of the SSSI.
- 5.47 Any planning permission granted for activities within a SSSI (once consents have been obtained) will also have environmental planning conditions placed upon it (MEEK 2013)
- **5.48** Planning Policy Wales (Edition 10 December 2018) Ancient Woodland
- At the far west end of the western red line study area is a small area of semi-natural Ancient Woodland covering approximately 0.53 hectares which is on the Ancient Woodland Inventory. Ancient Woodland and semi-natural woodlands and individual ancient, veteran and heritage trees are irreplaceable natural resources and have significant landscape, biodiversity and cultural value. Such trees and woodlands should be afforded protection from development which would result in their loss or deterioration unless there are significant and clearly defined public benefits; this protection should prevent potentially damaging operations and their unnecessary loss. In the case of a site recorded on the Ancient Woodland Inventory, authorities should consider the advice of NRW. Planning authorities should also have regard to the Ancient Tree Inventory (PPW Ed 10 2018, Section 6.4.26)

#### 6 Baseline Results

- **6.1 LANDMAP** (see Figure 14(ii))
- The greater part of the study area falls within the Historic Landscape LANDMAP character area of the *Cwmystwyth* (CRDGNHL102). This region was surveyed in 2009.
- 6.3 The *Cwmystwyth* is described as Marginal Land. Non-nucleated Settlement. Other Settlement. Extractive. Processing/Manufacturing. This area is entirely defined by industrial archaeology, lies across the valley sides and the valley floor of the Ystwyth. The valley here has a deep U-shaped profile, with the floor at 300m and the sides rising to over 500m. The sides are craggy. Archaeology is represented by Relict-Earthworks. Buildings & Structures. Documentary. Industrial Archaeology. Associations. Periods range from the Prehistoric, Roman, Medieval (to 1536), Post Medieval (1536+), Industrial and Recent. The area has been assessed as being *Outstanding* in all evaluation criteria due to its Industrial archaeology sites from prehistory and onwards.
- Bordering the *Cwmystwyth* Historic Landscape is also the *Upper Ystwyth Valley* (CRDGNHL155) positioned southeast of *Cwmystwyth*. To the north and south is the *Cambrian Mountains* (CRDGNHL101). To the west is *Pwllpeiran* (CRDGNHL131). The west red line study area falls within the *Pwllpeiran* (CRDGNHL131). This region was surveyed in 2009 and is described as Irregular Fieldscapes. Marginal Land. Nucleated Settlement. Non-nucleated Settlement. Other Settlement. Extractive. Processing/Manufacturing. This large and complex area lies across the valley of the Ystwyth. It ranges in height from 180m on the valley floor to a maximum of 380m on

the valley sides. Improved grazing land covers the majority of the farmed land, though rougher pasture is present. Archaeology is represented by Buried-dry. Relict-Earthworks. Buildings & Structures. Industrial Archaeology. Periods range from Post Medieval (1536+) to Industrial. The area has been assessed as having an overall evaluation of *Outstanding*.

- **6.5** Registered Historic Landscape Upland Ceredigion Historic Landscape area (HLW no. 4) (see Figure 15)
- It is not the intention here to write a comprehensive description of the Uplands Ceredigion RHL as there is a considerable amount of descriptive text available. Given that this report is primarily a feasibility study, only short relevant sections have been extracted from the register in order to put the study area under investigation into historical and geographical context. However, should there be a requirement for a planning application in the near future because of any potential development proposals then a full transcript from the register should be included in any future desk based assessment, heritage impact assessment or potential Assessment of Significance of Impact of Development on an Historic Landscape (ASIDOHL2).

"This extensive area of Ceredigion comprises a series of upland plateaux between about 200 and 400m above OD, bounded to the east by the Cambrian Mountains, the central spine of Wales, and dominated by Pumlumon Fawr at 752m above OD in the north. The plateaux are deeply dissected by the valleys of the Rivers Rheidol, Ystwyth and their tributaries, the lower reaches of which are below 50m above OD at the plateaux margins along the west side of the area. Cors Caron, a raised mire occupying the basin of a former lake on the upper reaches of the River Teifi, is included on the south west side. The whole area is rich in diverse and often visually dramatic evidence of land use and the exploitation of natural resources, from the prehistoric period to the present, and it also includes several sites with important historic artistic associations.

The valleys provide two major cross-mountain, east-west routes, the northernmost from the Rheidol valley via Devil's Bridge to the upper reaches of the Wye valley below Eisteddfa Gurig, and the other route from Devil's Bridge follows the Ystwyth valley virtually to its source and thence to the headwaters of the River Elan. These routes provided the spectacle of mountain scenery, open upland moors and rivers and waterfalls that became almost the stock-in-trade descriptions and views of the 18th century travellers and artists, particularly if they continued on to visit Thomas Johnes's inspired, designed landscape of Hafod in the Ystwyth valley.

The area became more accessible to the traveller with the coming of the railways in the late 19th century, but there were many false starts in the Manchester and Milford Railway's plans for lines across it. By the time the narrow gauge Vale of Rheidol line from Aberystwyth to Devil's Bridge was completed in 1902, the lead mines it was intended to serve had ceased production. From the first, as now, it was a tourist line from the seaside resort of Aberystwyth, up the Rheidol valley by a spectacular 1:50 gradient, to the beauty spot of Devil's Bridge.

Two major changes in land use separate the perceived, artistic and tourist landscape of the late 18th and 19th centuries from that of the late 20th century. The most recent, the afforestation of large areas of upland and valley sides, began in the 1920s and is now at its maximum planned extent. As in many other parts of Wales, it has created its own distinctive landscape which has arguably become as much part of the historical continuum of the exploitation of resources in the area as any other activity.

The second major industry represented in this area is the silver and lead mine industry whose period of most intense operation spans the late 19th and early 20th centuries. The principal sites with extant remains are Esgair-mwyn, **Cwmystwyth**, Frongoch, Ystum Tuen, Llywernog, Pontewryd, Goginan, Great Darren, Cwmsymlog and Bryndyfi. Most surface buildings and processing evidence is 19th century in date, but there are earlier traces from the 17th and 18th centuries era of the Mines Royal and Mines Adventurers. In 1637, Charles I gave Thomas Bushell permission to set up a branch of the Royal Mint in Aberystwyth Castle, which used silver from the lead ores of five Ceredigion mines. Of even greater significance perhaps is the recent and convincing demonstration through excavation and survey of prehistoric, Bronze Age copper mining from such sites as **Copa Hill** near Cwmystwyth.

Despite their late 19th century period of operation, the Ceredigion lead mining and processing industry relied almost wholly on water power. Many miles of upland leats

can still be traced and the storage reservoirs above the mines are now difficult to distinguish from natural pools. Water power is still important in the area and the River Rheidol and its tributaries are dammed below Pumlumon at Nant-y-moch, the site of the largest hydro-electric scheme in England and Wales, completed in 1962.

#### Metal mining

It is probably correct to state that no aspect of Ceredigion has been more studied, investigated and recorded than the metal mining industry. There is a vast amount of published literature on the subject ranging from papers concerned with the archaeological investigation of single sites, to general histories and photographic records - for instance: Lewis (1998); Bick (1974, 1983, 1988); Hughes (1988) and Carr and Schöne (1993). It is not the purpose of this study to provide a potted history of lead mining in Ceredigion, nor is it intended as a guide to the industrial archaeological remains. The purpose of this short thematic section is to provide a brief introduction on how the metal mining industry has affected and influenced the historic landscape.

Archaeological investigations at **Copa Hill**, Cwmystwyth have demonstrated the Bronze Age origin of this mine (Timberlake 1995). Roman workings have also been postulated at Cwmystwyth and the mine was worked in Medieval Period. It was not until 1690 when the Mines Royal Society monopoly on mining argentiferous ore was broken that private investment flooded into the industry, creating new opportunities, new mines and new jobs (Lewis 1998, 160). Booms in the industry were just as common as slumps, mining conditions were arduous and transport always a problem in such a remote area, but despite these difficulties mines continued to operate until the 1930s.

Apart from some sites in the extreme north of the county, all north Ceredigion metal mines lie within the study area. The impact of these mines on the historic landscape is considerable: there are very few historic landscape areas that do not contain some physical evidence of mining, and many possess considerable remains. Spoil heaps are the most common, and in many instances the most obvious and dramatic, remains associated with lead mines, but other structures are also often present: engine houses, processing plants, crusher houses, wheel pits, dressing floors, shafts and levels, and inclines and tramways. Because of the industry's extraordinary reliance on waterpower, leats, dams and reservoirs are ever-present in Ceredigion's upland landscape. An account of mining remains is provided in each of the relevant historic landscape area descriptions.

The success or not of the metal mining industry had a direct affect upon population levels and a concomitant effect on the settlement pattern, transport infrastructure and limits of cultivation and enclosure in this upland area of Ceredigion. Aitchison and Carter (1998, 8) have noted that in three parishes in north Ceredigion, a rapid rise in population in the second half of the 19th century, followed by an equally rapid fall, can be directly attributed to an increased production of lead ore and subsequent exhaustion of veins and mine closure. A graph of 19th century lead ore production from Ceredigion mirrors that of population. Abandoned cottages, houses and a retreat of cultivation from marginal areas are some of the effects of the changing fortunes of the lead mining industry that have embedded themselves in the historic landscape.

Owing to high levels of toxicity many spoil heaps and associated remains have been, and will be, subjected to environmental improvement works. Substantial engineering can be involved in decontamination, detoxification and reclamation programmes; usually resulting in the removal or landscaping of spoil heaps. The effect is to render mining remains less visible in the landscape, though care is taken to ensure that important archaeological remains are not damaged. Goginan, Cwmsymlog, Cwmerfyn and Cwmbrwyno are mines that have experienced environmental improvement in recent years".

(Extract from The Registered Landscapes of Outstanding Historic Interest in Wales & Registered Landscapes of Special Historic Interest in Wales - Uplands Ceredigion).

#### 6.7 Historic Character Areas

6.8 The Uplands Ceredigion RHL is divided into Historic Character Areas (HCAs). The Feasibility Study red line area falls directly within the *Cwmystwyth Metal Mines HCA* with parts of the northwest and southern ends of the eastern region also falling within both the *Cambrian* 

Mountains HCA and the Upper Ystwyth Valley (HCA). The red line study area to the west falls within the Pwllpeiran HCA. The full descriptive text of these four (4) HCAs is given below.

#### 6.9 i) Cwmystwyth Metal Mines HCA

- This historic landscape area has been defined by the mining industry. Archaeological excavations have demonstrated that opencast copper mining was undertaken here in the Bronze Age (Timberlake 1995), and lead has been mined here since at least Roman times (Bick 1974, 19-23; Hughes 1981). Metal was probably worked under the control of Strata Florida Abbey in the Middle Ages as this area lay within Cwmystwyth Grange. In the 18th century prospecting for lodes by scouring the surface of the ground by a sudden rush of water hushing was practised, and the channels and reservoirs of this process can still be seen. Metal mining in the 18th and 19th centuries has bequeathed a bewildering array of remains, an industrial archaeologist's paradise, including: tips, shafts, tramways, inclines, open-casts, crusher houses and other buildings. In the late 19th century the search for blende resulted in the construction of a large crusher house the rusting remains of which have only recently been swept away and other installations. Work finally ceased at Cwmystwyth in 1921.
- 6.11 Description and essential historic landscape components
- 6.12 This area, which is entirely defined by industrial archaeology, lies across the valley sides and the valley floor of the Ystwyth. The valley here has a deep U-shaped profile, with the floor at 300m and the sides rising to over 500m. The sides are craggy, even cliff-like on the northern side. The many scree slopes are more likely to be a result of mining than a natural process. Mining remains are everywhere. These are varied and most are of a robust character. Remains of stone built structures in this area domestic and industrial are scattered across the landscape. Many are in a perilous condition.
- 6.13 Recorded archaeology comprises remains directly associated with the metal mining industry, including finds of Roman date, or remains indirectly associated with the industry such as abandoned worker cottages.
- This is a well-defined area comprising the industrial archaeology of the metal mining industry. To the north and south lies high, unenclosed moorland, and to the east and west the enclosed and settled valley floor of the Ystwyth is found.

#### 6.15 i) Cambrian Mountains HCA

6.16 This very large area of high upland straddles the Ceredigion-Powys county boundary. The largest proportion lies within Powys, and, as this is outside the study area, has not been examined in detail. Historically a large part of this area lies within Strata Florida Abbey's granges of Pennardd, Mefenydd, Cwmteuddwr and Cwmystwyth (Williams 1990, 56-57). By the end of the Medieval Period, and perhaps earlier, the granges had been separated into farms, leased out and farmed on a commercial basis. It is uncertain how the upland sections of the granges would have functioned. Parts of the upland fringes undoubtedly comprised farms - a document of 1545-50 (Morgan 1991, 5-7) names farms now abandoned in an upland situation - but presumably most upland served as rough pasture used on a seasonal basis. Williams (1990, 59) cites a document that indicates transhumance in Mefenydd Grange. Other monastic uses included peat cutting and a fishery in the Teifi Pools. It is likely that on the Dissolution the Crown would have claimed unenclosed land, with farmed land first leased and later purchased by incipient estates, notably in this area the Crosswood and Powis Castle estates. Land acquired by the latter in and around Cwmystwyth eventually formed the Hafod estate. These estates were eager to increase the extent of their holdings, and engaged in the illegal enclosure of unenclosed Crown land, a process that was at its most active in the late 18th and early 19th centuries. Legal means were also employed. Enclosure Acts were sponsored. The two within this area, Gwnnws of 1815 and Llanfihangel-y-Creuddyn of 1866 (Chapman 1992, 50, 53), enclosed vast tracts of upland, as did an 1815 proposed act for the area of Teifi Pools (NLW Crosswood 347), but their physical effect on the landscape was minimal. In the 20th century, land improvement hand in hand with enclosure has nibbled away at waste and moorland. It was by these legal and illegal means that unenclosed land was reduced to its present extent. Crossing the area are several important transmountain natural route-ways linking farming communities and the markets of Ceredigion with lands and towns to the east. These trans-mountain route-ways are most celebrated by drovers in the historical period, but they are likely to be of greater antiquity. They not only provided communication across the Cambrian mountain chain, but allowed access onto the high moorland for the establishment of permanent or seasonal settlement, for the grazing of animals and for peat cutting. The route-way from Cwmystwyth to the east to Rhayader and beyond was converted to a turnpike in 1770 (Colyer 1984, 176-82), but was superseded by the opening of a new turnpike (the current A44) to the north in 1812.

- 6.17 Description and essential historic landscape components
- This is a very large upland area. It achieves peaks of over 500m, is on average approximately 400m high and rarely falls below 300m. Craggy outcrops on some of the higher summits and around Llyn Teifi provide much needed drama in an otherwise drab and monotonous landscape. Unimproved very rough grazing dominates with blanket bog at higher levels and peaty deposits in most hollows and valleys. There is some improved grazing, mostly on lower slopes where occasional wire fences divide the area. There are a few widely dispersed farms, in particular on the Powys side of the border. These are traditionally stone built, surrounded by a collection of modern farm buildings, and situated within a system of a few fields whose boundaries consist of earth banks, but where wire fences now provide the stock-proof barriers. The fields attached to these farms now comprise improved pasture, and there are further blocks of unenclosed improved pasture close by. This is a treeless landscape. Overall this is a landscape of unenclosed moorland.
- 6.19 Recorded archaeology is only described for the Ceredigion portion of this area. Archaeology adds greater time-depth to the landscape, as numerous Bronze Age round barrows and a standing stone suggest occupation within this area even at high altitude, although no settlement sites are known. However, post-Medieval settlement sites and other sites of the period such as folds, enclosures, shelters and field systems indicate that the lower-lying fringes of this area were occupied, through to the 19th century. Metal mining remains are also present.
- 6.20 This is a very well defined area and is either bordered by large blocks of upland forestry, or by lower lying enclosed and settled land. On the eastern side, in Powys, the boundaries of this area have not been accurately defined.

#### 6.21 iii) Upper Ystwyth Valley HCA

- 6.22 In the Medieval Period this area formed part of Strata Florida Abbey's Cwmystwyth Grange (Williams 1990). By at least the later Middle Ages the grange had been divided into farms that were leased out and farmed on a commercial basis. A document of 1545-50 (Morgan 1991) records farms in this area. By 1590, the Herbert family had acquired most of the land of Cwmystwyth. Herbert land passed to the Johnes family in 1704. However, the Earl of Essex was granted numerous abbey lands at the Dissolution and subsequently he sold them to the Crosswood estate in 1630. In this manner some land in this area came into the possession of Crosswood. Little is known of the landscape history of this area, but Crosswood estate maps of 1781 (NLW Crosswood Vol 1, 35, 73) show Ty llwyd and Ty mawr farms set in a landscape of small irregular fields on the valley floor. There has been very little change since that date. A chapel was constructed here in 1856 (Percival 1998, 518). The Ystwyth valley provides a routeway onto high ground to the east and over to Rhayader and beyond. In 1770, a turnpike road was constructed through the valley (Colyer 1984, 176-182); this was the main route from Ceredigion to the east for 40 years until a new turnpike, the present A44, superseded it some miles to the north. The road through Cwmystwyth is now a minor route much used by tourists in the summer months.
- 6.23 Description and essential historic landscape components
- 6.24 This area consists of the flat valley floor of the upper Ystwyth, together with the lower valley sides of enclosed land. From the valley floor, which lies at 230m to 300m, the valley sides rise steeply to over 500m. The enclosed land on the lower slopes is included in this area. Dry-stone walls and stony banks form the boundaries to fields. Only a few of the banks now support hedges, and these are in a derelict condition. Wire fences now run along most of the older boundaries. Some of the boundaries have distinctive trees on them and there are small stands of scrubby woodland. Farmland mostly comprises improved grazing, but there are many patches of rougher, rushy ground on the valley floor, and some of the fields on the lower slopes are beginning to revert to moorland.

- 6.25 Farms are dispersed along the lower slopes of this area. Apart from a couple of modern houses and bungalows, buildings probably date to the 19th century, are stone built (generally cement rendered on houses), with slate roofs. However, an exception is the house of the largest farm in this landscape, which is a substantial (for the region) Georgian style building probably with 18th century origins. This farm has large stone-built outbuildings. Other farms are smaller with houses in the later 19th century regional Georgian vernacular tradition. Outbuildings on these consist of one or two small stone-built ranges. A deserted farm with stone outbuildings set semi-formally around a yard is present. Working farms have small modern agricultural buildings.
- 6.26 Recorded archaeology of this area is not numerous or diverse. Of interest are the remains of a small metal mine.
- 6.27 This is a very distinct and well-defined historic landscape area. To the west lies the extensive mining remains of Cwmystwyth, on all other sides is high, unenclosed moorland.

### 6.28 iv) Pwllpeiran HCA

- 6.29 In the Medieval Period this area formed part of Strata Florida Abbey's Cwmystwyth Grange (Williams 1990). By at least the later Middle Ages the grange had been divided into farms that were leased out and farmed on a commercial basis. A document of 1545-50 (Morgan 1991) records within this area the farms of Pwllpeiran and Milwyn. By 1590, the Herbert family had acquired most of the land in the area, and this land passed to the Johnes family in 1704. Thomas Johnes expanded his holdings in the late 18th century by exchange, in particular with land held by Crosswood, to build an estate that would compose most of the land in the area. Johnes was an enthusiastic land improver and developer of new farming techniques; undoubtedly some field boundaries and buildings are the result of his efforts. However, late 18th and early 19th century maps (NLW Crosswood Deeds No 5, Ser IV, Vol 1, 33, 35, 36, 73, 75; NLW R.M. A64) indicate that field and settlement patterns were very similar to that of today, allowing for the disappearance of some farms, the creation of others and the sub-division of some enclosures. When the settlement pattern and field system originated is uncertain, but they may be of Medieval date or earlier. Experiments in increasing the productivity of upland grazing were undertaken here in the 1930s (Colyer 1982, 100-3), and in the mid 1950s several farms were purchased by MAFF and the Forestry Commission with the aim of improving the hill economy; this resulted in 1955 in the establishment of the Pwllpeiran Experimental Husbandry Farm (Wildig 1994). The core of this farm lies in this area, though much of its upland grazing lies in neighbouring landscape areas. The farm has been responsible for much land improvement and the development of new techniques of planting and maintaining hedges. Peiran mill, belonging to the Medieval Grange of Cwmystwyth lies in this area. The mill continued in use until the late 18th century (Macve 1998). Trial levels for lead were dug in the mid 19th century, but these were unsuccessful (Bick 1974, 23). The natural route-way of the Ystwyth valley in which this area lies was emphasised in 1770 when a turnpike road was constructed. This road, the present B4574, provided the main connection between north Ceredigion and eastern Wales and England, until the completion of a new turnpike road through Ponterwyd in 1812 (Lewis 1955, 42-45). Included in this area is Cwmystwyth village, with its chapels and school. The history of the village is uncertain, but it is probably of 18th and 19th century origin, and was reliant on the metal mining industry.
- 6.30 Description and essential historic landscape components
- 6.31 This large and complex area lies across the valley of the Ystwyth. It ranges in height from 180m on the valley floor to a maximum of 380m on the valley sides. Improved grazing land covers the majority of the farmed land, though rougher pasture is present at higher levels and on steep slopes. Fields are small and irregular. A variety of boundary types divide the fields. The most common type is the earth bank topped by hedges. Hedges on Pwllpeiran farm are generally well maintained, elsewhere their condition is variable; many are neglected and becoming overgrownin some cases almost grown into tress and on higher ground they have disappeared. Wire fences supplement most hedges. Dry-stone walls with capstones set at 45 degrees are also present these are the work of Thomas Johnes as are mortared walls alongside some roads. The dry-stone walls are in poor condition, but the mortared walls are in better condition. Small stands of broadleaf trees and small conifer plantations lie on valley sides. These together with the overgrown hedges lend a wooded appearance to parts of the area.
- 6.32 The settlement pattern is of dispersed farms and cottages, which includes Pwllpeiran Experimental Husbandry Farm with its complex of modern farm buildings and offices, plus a loose nucleation of industrial dwellings at Cwmystwyth. Older buildings probably date to the mid-to- late 19th century and are built of stone, which is cement rendered, left bare or painted on houses, and

left bare on farm outbuildings. Houses are of two storeys in the regional Georgian vernacular style – gable end chimneys, central front door, and two windows either side of the door and one above. Some houses have strong vernacular traits whilst others are firmly in the Georgian tradition. An estate influence is detectable on some houses. Nineteenth century farm outbuildings are generally of two or three small ranges, but there are a couple or larger examples on some farms. Most working farms have small modern steel and concrete agricultural buildings, but there are a couple of examples of very large modern buildings. A lodge to the Hafod estate as well as other estate influenced buildings lie at Cwmystwyth. However, the main building type here is the worker house. These are either mid-to-late 19th century terraced vernacular cottages or are later 19th century houses in the Georgian vernacular style. There are several deserted cottages and houses in this landscape. Apart from Pwllpeiran farm, there is very little modern development.

- 6.33 Recorded archaeology is confined to metal mining remains and deserted cottages and farmsteads.
- 6.34 The boundaries of this area to the north where it edges forestry, and to the south and west against unenclosed land are well defined, but less so to the east where it merges with a squatter settlement. The core area of the Hafod estate to the southwest historically merged with this area, but its now heavily forested character provides a clear boundary line.

#### 6.35 Summary History of the Cwmystwyth Mines

6.37

- 6.36 The following is a brief summary history of the Cwmystwyth Mines as given by Cadw in their scheduling description of the Cwmystwyth Mine (CD145). This is included here only as an official introductory text to the next section which offers a summary description of the known heritage assets within the red line study areas and the wider landscape study areas and a more detailed description of the history of the Cwmyswyth mine and part of Copa Hill was designated a scheduled site in 1985.
  - "The earliest working on the site dates back to the Bronze Age, confirmed by the C14 dating, to 2205-1950 CalBC, of timbers found in excavations. Roman working at the site has been claimed but never positively attested. Historical sources for the mine, which are numerous, take the story back to the medieval period (roughly, in this case, the 13th to 15th centuries), when the mine came under the auspices of the Cistercian abbey at Strata Florida. Work in this period is however likely to have remained relatively small-scale, though as time went on, rights were increasingly sub-let to tenants. Around the time of the dissolution of the abbey in 1536, interest from private entrepreneurs increased and Leland's account of the mine at this time suggests that there was already a substantial enterprise with pollution from smelting affecting the woodland for some way around. Despite much of the site coming under the aegis of the Society of Mines Royal from the mid-16th century until 1693, disputes continued between lessees and potential lessees, which make it clear that work was underway during the 16th century on 'Craig y Mwyn', probably the area around the Nant y Gwaith, and in the 17th century in the area beside the Nant yr Onnen at the north end of Copa Hill. In 1698, the Company of the Mine Adventurers was formed, and under their supervision, and in particular that of William Waller, activity in the early 18th century was much more extensive across the scheduled area. This episode ended in a fraud scandal, and the extent of the Company's further involvement is not altogether clear. Other lessees took over, and activity in most parts of the complex continued during the century, with, in particular, the construction of a very impressive array of hushing reservoirs and gullies which would have been used for the removal of overburden using water pressure. By the end of the century the mines were being worked very successfully by Thomas Bonsall. This was however their high point, and though the 19th century saw technology of increasing complexity put to work in the mines by a variety of lessees, which included John Taylor and Sons, whose interests were widespread in Ceredigion, the most easily available deposits were by this time largely mined out, and deeper, more difficult and poorer ores were being worked, with consequent greater expense and diminishing returns. The long history of earlier mining added to the problems, with un-surveyed earlier workings providing constant difficulties for the various enterprises when encountered unexpectedly, and even known workings necessitating extra expense when planning new developments. Bad weather and drought, which meant water-wheels could not work, added to the woes of the various enterprises, as did falling prices due to the development of more

economical mineral sources overseas. Nonetheless, production continued with varying success for most of the century. In 1900 a substantial investment was made by yet another newly established company under Henry Gamman, including the construction of the large processing mill at the heart of the complex which remains a major feature today, albeit at ground level only, and of new housing for the workforce. The mines themselves were developed considerably in the following years but were never altogether successful and by 1916 Gamman's means were exhausted and he faded from the scene. Very limited production limped on between the wars, largely involving the re-exploitation of older dumps, but in 1939-40 wartime bureaucracy put a stop even to this, and the mine never reopened.

The monument is of national importance for its potential to enhance and illustrate our knowledge and understanding of mining technology from a variety of periods. (Cadw Entry description)

## **6.38 Heritage Assets within 1.5Km Buffer Zone** (See Figures 40 - 47)

- Within the red line Feasibility Study area a total of 137 Historic Environment Record (HER) sites have been recorded. This number includes 130 sites within the eastern red line area, the area of the Cwmystwyth Mine, and four (4) sites within the western red line area. Of the 130 sites in the eastern red line area, 125 sites are post medieval sites associated with the Cwmystwyth Mine, being either structures, linear features, shafts, adits, levels, waste tips or other mining features. All of these HER sites have been recorded as part of several surveys undertaken over the years and in particular the survey work undertaken by Robert Protheroe-Jones of the National Museum of Wales in 1993 as part of the Ceredigion metal mines survey. This survey work was aided by the already existing work of David Bick in the 1970s and Simon Hughes in 1981. The other HER sites within the eastern red line area pertain to deserted rural farmsteads and of particular importance, the discovery in 2002 during excavations by Simon Timberlake and team of a Bronze Age grave with a gold artefact at the far east end of the eastern red line area. A general reference data point is also given to the potential Roman activity at the mine.
- In the western red line area a further four (4) HER sites are recorded. These 4 sites include a post medieval cottage/mill with mill race and a small lead mine complex.
- Outside of the red line areas a further 280 HER sites have been recorded. These HER sites include 105 HER sites associated with the Cwmystwyth Mine but are positioned outside of the red line study area on the upper slopes of Pant Morcell, Craig Dylfa and Copa Hill. The remaining sites are spread out across the 1.5km buffer zone and include sites of all periods.
- 6.42 All of the HER sites within the 1.5Km buffer are summarised chronologically in the following section.

#### 6.43 Prehistoric Periods (Palaeolithic, Mesolithic, Neolithic, Bronze Age)

In 2003 Simon Timberlake published the results of survey work and investigative works, with sampling and evaluation trenches, undertaken on Copa Hill, at Cwmystwyth between 1986-2002. The results of this work revealed that the earliest working on the site dates back to the Bronze Age, confirmed by the C14 dating, to 2205-1950 CalBC, of timbers found in excavations. The survey work also showed that Copa Hill is an area with a complex and rich mining landscape, which spans ten historic phases of mining and prospecting, overlain with a more recent agricultural landscape. Evidence of medieval and post- medieval elements and traces of a former prehistoric landscape are also still recognisable.

"Copa Hill saw different phases of the mining: Early Bronze Age Opencast; Medieval leats, hushes, a trial adit working and lead roasting and smelting hearths along with platform houses and field banks; Post-Medieval, including the largest complex of mine workings on Copa Hill the 'Roman Dumps', through to Victorian and modern twentieth century mining found lower down on the south and west slopes of Copa Hill and include deeper shaft workings and a succession of shafts and levels and the construction of the stone bank and bridges for the self-acting incline and its associated features all add to the complexity of the site. There is also evidence for small-scale peat extraction on the top of Copa Hill with small rectangular platforms for drying platforms and ruts which suggest sledges were used to carry the peat.

Copa Hill is therefore, perhaps typical of a small-medium sized opencast trench mine which exploited impersistent but locally rich pockets of copper ore within copper-lead-zinc sulphide veins cutting the Lower Palaeozoic rocks. The earliest mining may have been commenced around 2500BC with surface collection of minerals and undercutting with fire used to excavate the rock and break up the copper ore. By 2000BC opencast mining was being carried out from the down-slope end of the trench, with the mine reaching its maximum depth about a hundred years later. Over the next two to three hundred years, following abandonment of the deeper sections of the mine due to water-logging, the mine continued to be worked upslope (northwards) on a more piecemeal basis. The mine was finally abandoned in 1600BC following continued water-logging and infill from peat and mine spoil. The finds at the mine of water-worn cobbles (since 1986, 1203 of unbroken or partially complete have been found), used as mining hammers, crushing stones and anvils is characteristic of primitive prehistoric mine, and with few other identifiable remains from habitation or smelting, suggests it is typical of those mines which produce no ceramic or metalwork remains, and were seasonal in nature. The miners may have been pastoralists. The site may have produced only 1-2 tons of copper in total, which could have traded by the miners piecemeal as ore concentrate rather than as refined metal.

Finds during the excavation include numerous wooden artefacts; three bronze age wooden launders; wooden stakes and posts, mainly from within the prehistoric levels; stemples and planks found deep within the workings and associated with the early bronze age mining; handles, wedges, fire-stick etc; withy handles, ties, rope and basketry. One complete antler pick/hammer, two large broken tine fragments plus several detached flakes or splinters were recovered from fine-grained mine sediments within the mine entrance " (TIMBERLAKE 2003)

- This prehistoric site on Copa Hill is almost certainly the best preserved Bronze Age mine in Britain in terms of its archaeological remains, and with 20 years of excavation and post-excavation work undertaken, this is probably the best studied (TIMBERLAKE 2009). The opencast area and the area of hushing on Copa Hill forms the northernmost part of the Scheduled Monument area (CD145).
- As well as the fact that early opencast mining was undertaken at the Cwmystwyth Mine (NPRN: 115 / PRN: 5461) in the Bronze Age, as is evident from the excavations undertaken between 1986 2002, further evidence of Bronze Age activity in the immediate landscape within the red line study area is provided by the discovery of a Bronze Age grave (PRN: 105877) containing a gold decorative disc discovered during excavations of a medieval metal working site (PRN 105876) at the base of Copa Hill in the area of Tynddol at the far east end of the red line area (EAST).
- 6.47 The Banc Ty'nddol disc is 38.9mm in diameter, with a weight of 2.51g, made of a very pure gold that is composed of between 93% and 94% gold, 6% and 7% silver and a negligible amount of copper. It is decorated with concentric line and dot circles and pierced by two central holes, apparently for attachment. The design was determined to belong to the Primary Bell Beaker Goldwork Tradition. Even though the exact source for the metal cannot be established, the composition appears consistent with that for Irish, Scottish, and Welsh alluvial gold. The disc most likely was made for a funerary garment and possibly, to symbolize the life-giving power of the sun. Further investigation of the discovery site revealed skeletal remains that once were covered over by a cairn (TIMBERLAKE 2003 + 2009).
- 6.48 Within the 1.5Km radius from the red line area boundary there are a total of seven (7) known Bronze Age sites. This number includes two sites on Copa Hill just outside of the red line study area (PRN: 35581 / 42223) and a five (5) cairns in upland areas on Glog, Nant Watkin, Chatham and Pant Morcell. None of these cairns area scheduled sites (PRN: 42194 / 35916 / 42190 / 42200 / 42189).
- 6.49 As well as these Bronze Age sites there is also one record of a prehistoric findspot (PRN: 100640) for a roughly oval stone with perforations on both sides found at Llanfihangel y Creuddyn Upper.

6.50 Given the evidence for Bronze Age activity at the site there is a high potential for further unknown prehistoric sites to be found in the area of the designated site as well as the red line area as a whole.

#### 6.51 Iron Age and Romano-British period

- 6.52 Roman workings at the site have been claimed but never positively attested. Iron Age and Roman activity at the Cwmystwyth mines is potentially evident from finds of pounding stones and a saddle quern (PRN: 2071 / 2901) found at Copa Hill, thought to be Roman in date.
- 6.53 The Early Mines Research Group undertook palaeoenvironmental investigations of the blanket peat on Copa Hill between 1986 1999, which have suggested that there was also Roman mining for lead, probably undertaken in the 1st and 2nd Century AD. Although no definitive Roman workings have been found in the location of Copa Hill, a Roman lead bole (i.e. a lead smelting hearth) was uncovered at the foot of Copa Hill in 2002 (MIGHAL, TIMBERLAKE, CLARK & CASELDINE 2002).
- 6.54 Given that mining activity was prevalent in the Bronze Age on Copa Hill, some form of opencast mining or prospecting in the Iron Age and the Roman period would have been extremely likely at the site. Apart from the Cwmystwyth Mine itself as a whole entity, thee are no further known Roman sites within the red line study area.
- Other than the Roman findspots mentioned above, there are no further known Roman sites within the prescribed 1.5Km search radius.

#### 6.56 Medieval Periods

- 6.57 Medieval mining at Cwmystwyth seems to have been confined to the opencast area of Copa Hill and a number of features toward the base of Copa Hill. Medieval features include leats, hushes, a trial adit working and lead roasting and smelting hearths along with platform houses and field banks (TIMBERLAKE 2003).
- 6.58 The earliest historical references to the Cwmystwyth Mine go back to the 13th to 15th centuries, when the mine came under the auspices of the Cistercian abbey at Strata Florida, known as the Briwnant Grange (PRN: 12454) Work in this period is however likely to have remained relatively small-scale, though as time went on, rights were increasingly sub-let to tenants on a commercial basis.
- Outside of the red line study area, the HER records a total of thirty-two Medieval sites, These sites include 4 areas of Common Land, 3 deserted medieval settlements, 1 enclosure, 2 farmsteads, 1 Grange, 3 long huts, 4 longhouses, 4 platforms, 1 settlement, 1 sheepfold, 7 shelters and 1 water mill.

#### 6.60 Post Medieval to Modern Periods

The post medieval to modern periods typically have the greatest concentration of heritage sites within the 1.5Km buffer zone. In total the HER records 237 solely post medieval and modern period sites within the entire wider landscape study area. Of this number 123 sites are all associated with Lead mining in either the Cwmystwyth valley, Copa Hill or else in other upland areas including small workings at Glog and Graig y Ddalfa, Mine features include shafts, levels, trial pits, hushes, collapsed stopes, leats, adits, sams and other mining features. The remaining 114 sites include post medieval boundary banks, bridges, buildings, clearance cairns, cottages, deserted rural settlements, farmsteads, long huts, paths, peat stands, schools, sheep folds, shooting stands, trackways and wells. For details on these sites see the Gazetteer of HER sites in Appendix III. Of this total number, only five (5) sites are designated Listed Buildings, all having Grade II Listing. None of these designated sites are positioned within the red line study areas, the closest being positioned within Cwmystwyth village. These designated sites include:

- i) Nantycae (LB: 83,415)
- ii) Briwnant Cottage and attached cottage (LB: 84,249)
- iii) Gate Cottage (LB: 84,254)
- iv) Gatepiers and gates at Hafod Lodge (LB: 84,255)
- v) Hafod Lodge (LB: 84,256)

- 6.62 The large number of Lead mining sites in such a small radius is a reflection of the true significance and impact that Lead Mining had on the Ystwyth Valley alone from the mid 16th Century to the 20th Century. The impact from these mines on the historic landscape is considerable and physical evidence of lead mining remains scattered across Ceredigion. The most common, obvious and striking feature of all these lead mine remains is spoil heaps, but other structures are also often present, such as engine houses, processing plants, crusher houses, wheel pits, dressing floors, shafts, adits, levels, inclines and tramways. Because of the industry's extraordinary reliance on waterpower, the remains of an extensive leat system remains etched into this landscape, along with dams and reservoirs which are an ever-present feature in Ceredigion's upland landscape alone. The principal mining site in the Ystwyth Valley was of course the Cwmystwyth Mine. Although there have been numerous other smaller mining ventures along the slopes of the Ystwyth Valley, such as the South Cwmystwyth Mine (PRN: 19983), a number of small ventures on top of Glog (PRN: 33177) and the Pentre mine (PRN: 42634) in the red line area (WEST), none of these mines have such extant remains as the long running Cwmystwyth Mine (NPRN: 115 / PRN: 5461 / SM: CD145)
- Before exploring the history of the Cwmystwyth Mine, a brief summary history is needed of metal mining in mid Wales, given that there are a number of very notable characters from history that have helped forge not only the heritage and identity of the peoples of mid Wales, but have also helped shape the historic landscape that we see today.
- 6.64 Metal Mining in Mid Wales
- The history of metal mining in mid-Wales has been investigated and recorded extensively over the decades. There is a great deal of published literature on the subject that range from archaeological reports on investigations of single sites, to more general and some even comprehensive histories and photographic records. Principal writers include Lewis (1998); Bick (1974, 1983, 1988, 2004); Hughes (1981, 1993), Carr and Schöne (1993) and Timberlake (1995, 2002, 2003).
- The earliest evidence of metal mining in mid-Wales comes from archaeological investigations at *Copa Hill*, Cwmystwyth, which have demonstrated the Bronze Age origin of this mine (Timberlake 1995). Roman workings have also been suggested at Cwmystwyth and we also know that the mine was worked in Medieval Period. However, other than archaeological evidence very little documentary evidence survives of mining in the area before the 16th Century (BICK 2004).
- 6.67 However, in 1568 Queen Elizabeth I established the Society of Mines Royal which allowed the Crown the monopoly on all mines containing commercial amounts of gold and silver. The mere fact that this occurred at this time suggest that mining of gold and silver on a significant commercial basis across Wales was causing a major concern with the Crown. This would suggest that some commercial mining had most probably been going on for some time before the Society was established.
- 6.68 In 1617 Sir Hugh Myddleton, a goldsmith, along with a number of other investors from the region, leased the Cwmsymlog gold mine from the Crown. Hugh Myddleton was the brother of the Mayor of London. For over a decade the Cwmsymlog mine was considered to be the most successful mine in the region. Unfortunately Myddleton died in 1631 and the mine fell into ruin and disrepair.
- In c.1635 one Thomas Bushell re-opened Cwmsymlog and a number of other mines, Daren and Goginan. However, by 1646 the English Civil War had brought mining to a standstill. It wasn't until 1689 that a large vein of silver was found at Esgair-hir, north of Ponterwyd that mining in mid Wales began to become a force of great attraction and private investment flooded into the industry. An Act was passed by Sir Carbery Pryse that allowed all subjects to work their own minerals on their own land unhindered by the Crown.
- 6.70 In 1698 the Company of Mine Adventurers was formed, funded by a lottery. The principle promoters were William Waller and Sir Humphrey Mackworth. By this time the Esgair-hir silver mine had been immensely profitable. However problems with water and deepening veins of ore were affecting the mines performance and as a consequence of these serious problems, prospecting for new mines in the area was undertaken. New mining areas included re-opening the old mine at Cwmsymlog and Goginan and new discoveries at Darren were made in 1704, the same year William Waller published his book (see Figure 17), A Description of the Mines of Cardiganshire.

- 6.71 The 18th and 19th centuries were the great age of British mining when Britain was the world's main producer and developed new techniques of mining and smelting. After 1780 especially after the beginning of the Napoleonic Wars, the manufacture of lead sheet, pipe, shot and red and white lead for specialist glass and pottery and enamel glazes, grew rapidly both near where the ore was mined and smelted, and at the ports of Bristol, London, Liverpool, Chester, Hull and Newcastle. By the 19th century the uses for lead grew exponentially. In the late 19th and 20th century further uses for lead were discovered such as lead for batteries and later as an additive in petrol as anti-caking agent for internal combustion engines.
- 6.72 In Wales this boom in mining is reflected in the growth in the lead mining industry in the Ystwytyh and the Rheidol Valleys. Booms in the industry were just as common as slumps, mining conditions were arduous, constructing new engineering and pumping equipment was gruelling in upland conditions and transport was also always a problem in such a remote area, but despite these difficulties the mines continued to operate until the 1930s. In the early 19th Century the region suffered worst than most at the hands of dishonest promoters whose mission it was to float companies for quick profit by share-pushing and in consequence, scores of short-lived ventures arose, with frequent re-namings of mines (BICK 1975).
- 6.73 Summary History of the Cwmystwyth Mines
- 6.74 What follows is a summary history of the Cwmystwyth Mines taken from David Bick's work in 1975, and Simon Hughes invaluable work undertaken in 1981, with further references made to William Waller's descriptions in the 18th Century. As stated in an earlier section, it is not the intention here to write a full and comprehensive history of the Cwmystwyth Mine as this will form an essential part to any future desk based assessment to satisfy and inform any future planning decisions. The intention here is to write only a concise as possible summary history so as to help inform the feasibility study for remediation design proposals.
- 6.75 The Society of Mines Royal mined *plumbum fertile*, a galena with a sufficient silver content. This mining began from 1568, the date of the Society of Mines Royal foundation. However it wasn't until 1583 that the Cardiganshire mines were leased to one Thomas Smythe by the society president, the Earl of Pembroke. Smythe appointed one Charles Evans as his manager who in turn hired 40 miners. His initial focus was at the Cwmsymlog Mine and from 1575 to 1590 Smythe and Evans boosted lead output from British mines from 300 tons to 800 tons per annum.
- 6.76 In 1588 Evans took up the lease of Cwmystwyth with John Hopwood as his partner for 21 years. But by 1595 he had surrendered his half to Hopwood. Hopwood then sublet the Cwmystwyth Mines to Sir Gelly Meyrick and Gregory Price. However in 1601 the validity of his lease was questioned and the courts decided to transfer Meyrick's lease to Sir John Morley. Morley let the mine to one John Callender and Sir Richard Lewknor. Following complex legal proceedings over the legitimacy of leases and ownership of Copper Hill, the Society of Mines Royal ratified the situation, to an extent, by reclaiming the western part of the mine and the crown issuing leases for Copperhill surface and minerals. This resulted in two mines being worked together by sub lessees.
- 6.77 By 1617 leases were issued to Hugh Myddleton and Sir Francis Bacon. It's at this time that there were several shuffling and transferring of leases at the mine. This is discussed in depth and Simon Hughes's history of the mine.
- 6.78 In 1631 Hugh Myddleton died and his interest in the mine was passed on to Thomas Bushall by Lady Myddleton the recent widow of Hugh Myddleton. Bushall in 1637 was the co-surveyor and general of the Society of Mines Royal. From 1641 to 1649 Bushall worked the Cwmystwyth mine, but in 1649 he was proclaimed to be a Royalist and a friend of Charles I and as a consequence he fled to Portugal where he was eventually imprisoned. He later returned to Britain and retired to the Calf of Man in about 1665.
- 6.79 His partner however, one Edmund Goodyeare, worked at the Cwmystwyth Mine from 1649 1660, but his lease was revoked by the Society of Mines Royal in 1663.
- 6.80 In 1669 one Morgan Herbert was appointed tenant of the mine, but on behalf of one John Jones of Nanteos mansion and Cornelius le Brun. Morgan Herbert was the first tenant to exploit the massive swelling out of Kingside lode on Copper Hill, later called Herbert's stope.

- 6.81 In 1693 the Mines Royal Act was passed which repealed the previous acts and the Crown forfeited any claims on mines of lead, copper and tin, regardless of their silver content. This spawned the Company of Mine Adventurers with William Waller and Sir Humphrey Mackworth as the directors in 1698.
- Following an initial focus on the Esgair Hir mine, in 1704 the company of mine adventurers eventually put thought to Cwmystwyth, but they were primarily interested in Copper Hill and other potential sites such as Pentre or the Briwnant Mine. At Copper Hill, William Waller instructed his workmen to build a stamp mill below Herbert's stope and by 1708 Waller states that he had driven 607 fathoms of levels, adits and shafts. Of this number Simon Hughes has estimated that 51 fathoms were probably productive and yielded approximately 580 tons of ore. These initial workings were at Cwmystwyth around Abrahams Adit on Copper Hill; Nantrefach, near Gill's Upper Adit at Pugh's mine; Pentrefach, just north of Pugh's Mine; the Blue Level of the Pengeulan Mine; the Stamping Mill vein which follows the Kingside lode from Herbert's stope; Craig y Moyne, probably by the Graig Fawr workings, and; the Briwnant, probably Pentre Mine, positioned in the red line area to the west near Cwmystwyth village.
- In 1725 Thomas Powell of Nanteos worked the Cwmystwyth mine. However Powell was also in conflict with one Elizabeth Hughes of Llanfihangel y Creuddyn, who claimed to be a tenant for life on the old monastic land of Strata Florida. Elizabeth Hughes alleged that the mines had been granted by her to the Company of Mine Adventurers. This claim inevitably caused conflict and in 1731 a group of miners attached to Hughes began working at Cwmystwyth on behalf of the adventures. Powell took legal action and eventually ejected the 'pirates' from the land by force.
- In 1758 one Chauncey Townsend was granted a lease to work the Cwmystwyth mines by William Powell of Nanteos. Townsend assigned one Thomas Bonsall of Derbyshire as his manager. Chauncey however died in 1770 and the lease was passed on to his son James. Thomas Bonsall was kept working at the mine, but unfortunately by this time the price of lead ore had dropped significantly and soon his interest in mining disappeared. Bonsall was also the manager of the Ystumtuen Mine at this which was also leased by Chauncey Townsend.
- 6.85 By the mid 1780s Thomas Bonsall leased the Cwmystwyth mines. Bonsall was disliked by many in mining circles due to his poor safety record. An example of this was his habit of mining pillars known as 'cranches' which were usually left as extra support for hanging walls of lodes.
- 6.86 However, although Bonsall's techniques were frowned upon, the Cwmystwyth mines reached there peak and his best-known project was Level Fawr, also known as Bonsall's level, which was a long drainage adit for Graig Fawr. Bonsall and his men are also attributed to the creation of the Cross Road Adit and the Turf Stack Adit and the Pengeulan Adit. A valuable source of information regarding the mines at Cwmystwyth is the Bonsall Day Book of 1784-1788. Other valuable accounts for this period include a description of the mine by one Francis Thompson in 1788, where he describes the Waller stamp mill and the process of hushing on Copper Hill.
- 6.87 By 1792 Bonsall had leased the mining rights to work Graig Fawr and above Gill's Adit and Dick's Adit. The mine soon became very profitable. Bonsall was knighted in 1796 but died in 1807. His son inherited the estate who appointed one Hugh Hughes to act as trustee for the mine.
- 6.88 In 1807 the lease was granted to one Joseph Jones of Blaen y Cwm by William Powell of Nanteos. Unfortunately disagreements and complications over the lease ensued again and it wasn't until 1811 that Jones began to work at Copper Hill following a grant by the Crown. The rest of the mines were leased by John Marsden.
- 6.89 By 1822 the lease on the mines had been granted to the Alderson Brothers and one James Raw from Yorkshire. Success at the mine grew for a while and these lessees were responsible for building a smelting house at Devil's Bridge. By 1834 however, the brothers were declared bankrupt and in 1835 the lease passed to one Lewis Pugh from Aberystwyth. By this time the price of lead had now soared significantly. Pugh started working the mine with the existing Yorkshire and Derbyshire miners on site and was responsible for the two Gill's adits and Pugh's Mine.
- 6.90 The next lease began from 1844-1848 and was held by one Abel Gower and one Gregory Walters. In 1848 the lease passed over to John Taylor and Sons, with Abel Gower being kept as

a shareholder. John Taylor was responsible for the Kingside Shaft. John Taylor and his sons ran the mine for another 20 years. Taylor was assisted by Samuel Kendall and Captain Charles Burrell. In dire need of modernisation, the Taylors hired one William Mitchell, an experienced Cornishman. Mitchell abandoned the old dressing mill as used by Bonsall and Pugh and moved to a new site some 200 yards to the west. New offices were built, a new waterwheel replaced the old horse gin and new jigs and buddles were installed. As well a new adit was driven from the back of the new mill. This was Mitchell's Adit cut into the Comet Lode, which was unfortunately for them narrow and very poor. This adit was consequently abandoned. By 1876 only 15 tons of ore were being mined per month. However by this time Zinc blende was fast becoming a very profitable commodity and this caused the Mitchell Adit to be reopened and eventually the New Lode was cut, which proved to be of massive dimensions and soon a cross cut was made known as 'Rosa' named after Mrs Powell of Nanteos. To deliver this new lode, a new compressor, two new rock drills, a turbine and high pressure pipes, a second crushing mill with rollers with a 20ft waterwheel were installed and constructed. As well, new leats, launders and a weir extension to reservoir dams were also constructed.

- By 1877 the Taylor's had also installed a tramway system so that wheelbarrows were no longer needed on site. At about this time a boom had started in mining throughout the British Isles. At Cwmystwyth, a new mine, the *South Cwmystwyth Mine*, began work on the south side of the Ystwyth River. This was managed by one John Kitto, but the venture was short-lived and proved disastrous. William Mitchell left Cwmystwyth Mine in 1880 and started a private venture named the Nant y Rhys Mine. Mitchell was replaced as manager by Captain Oakes, Robert Hancock and Joseph Rowes. Although Oakes and Hancock departed after only one year, Rowes stayed on and was responsible for the creation of a tramway system throughout the Gill's Higher and Lower Adits. He also sank winzes between these two adits.
- In 1881 mining at the site came to abrupt halt due to violent weather which saw the entire mine site buried with deep snow up to 15 ft in places. A subsequent bout of extremely dry weather prompted further problems at the mine and the miners pent most of the year repairing and replacing ice damaged timbers. Between the years 1881-1885 the output of the mine diminished rapidly and in 1885 Taylor and Co closed the mine, but reformed it as the *Cwmystwyth Company*. However, by 1886 disaster following disaster, further droughts, flooding in the Pugh's workings, a broken crusher shaft and a severe cloud burst that caused damage to weirs and leats, caused the Cwmystwyth Company to sell their interests to the *Kingside Mining Company*, and as such the mine once again became two entities, the *Kingside Mining Company* working the Pengeulan shaft and the *Cwmystwyth Company* working the Pugh's workings. Lead ore however was poor for the Kingside Mine and by 1893 the company had liquidated. The *Cwmystwyth Company* had also stopped mining in late 1892.
- 6.93 In 1897 one Henry Gamman began to show an interest in the Cwmystwyth Mines and by 1900 had started the *Cwmystwyth Mining Co. Ltd.* In 1900 Gamman's company erected a new dressing mill on the site of the former Taylor and Sons mill. The power sources were primarily hydraulic with turbines set alongside the stream at Nant Watcyn and another close to Taylor's Adit which drove a ventilation fan. Gammon and his company were responsible not only for introducing new mining techniques and developments, but also for constructing housing for miners and social improvements. As well as these, Gamman is also remembered for the creation of a tennis court built for his daughter Isabel, his champagne parties for staff when a good ore was discovered and the introduction of statutory children's parties at the site.
- In 1905 the company was reformed under the name *Kingside Zinc Blende Co. Ltd.* From 1907-1909 however Gamman had eventually exhausted all of his capital and managed to convince *Brunner, Mond & Co. Ltd.* to invest in the mine. However by 1911 the *Kingside Mining Co. Ltd.* had formed with the *Gamman, Tata Co.* However, by 1916, being both disillusioned by the failure of his investments, as well as the death of both his sons in France during the war, Gamman retired and the mine from 1913-1916 was taken over by the *May Co.Ltd.* under Howell Evans and Co. This company however was shortlived and by 1916 and through to 1923 the *Cwmystwyth Mining Co. Ltd.* was formed with *Evans, Stocks & Co.* In 1923 the *British Mining Corporation Ltd.* took over the mine but again this venture was short and in 1925 the *Craig & Herbert* mine was in operation, but only for one year due to lack of capital.
- 6.95 From 1927 to 1950 the *Gallois Lead & Zinc Mine Ltd.* operated at the mine under the management of lames Crichton and P. Fermanoglou. Fermanoglou was a Cypriot who had been engaged in the Macedonian tobacco trade but lived in London. Initially the company looked at the

underground workings with some drilling undertaken in Level Fawr and the Kingside Adit, but the results are not known, but these cannot have been good. Drilling was also tried on Copper Hill but the results from these drillings were not promising. Crichton soon left the company and was replaced by another Cypriot, Djermendjoglon, who had previously worked with Fermanoglou in Macedonia. They appointed as their site manager one Rufus Brown who resided on the mine along with Howell Evans who was still living in the old managers house of the former Gamman to Cwm Ystwyth Co. The Gallois company probably raised only small amounts of ore from the mine in the mid 1930s, but most of the material was a blende and hand picked from the dumps around Pugh's shaft. In 1939-40 Brown fell out with Fermanoglou and stopped working at the mine but continued to live in the house. Djermendjoglon had already departed from the company and Fermanoglou was left to try and get the mine working fully again. Gradually however much of the mine machinery was sold off and following requests to the government for financial support with no results and the consequences of the WWII the mine was eventually abandoned. After the war there was very little left at the mine apart from empty buildings. Winifred Brown, the widow of Rufus Brown who had died in 1941 as a consequence of a ploughing accident when his tractor fell on him and crushed him to death, lived at the old staff house until about 1950 when she moved away. The mine gradually fell into ruin. Nevill Place was frequented often by tramps and vagrants in the 1960s but this building was eventually burnt down following an accident. The rusting corrugated steel building of the former Gamman dressing mill remained standing precariously until the mid 1980s when the building was eventually dismantled and stored at the Llywernog Mine Museum at Ponterwydd. From its abandonment in 1950 through to the mines purchase by the Cambrian Mines Trust in 2013, the mine has been used continuously as a dumping ground for old house appliances and cars and the ruinous buildings used as a source of building stone for garden walls and rockeries.

#### 6.96 Archaeological & Research Work

- 6.97 Although the significant historic descriptions and plans by William Waller have offered invaluable information about the Cwmystwyth mine of the late 17th and early 18th century, it wasn't until the beginning of Industrial Archaeology that interest in lead mining in Wales began to emerge as a serious archaeological concern. One of the pioneers of this interest in lead mines of mid-Wales was of course the late David Bick who wrote a series of informed books in the mid 1970s, a series that are now seen as essential to any library on the history of lead mining. David Bick also wrote books on William Waller. David Bick was also the founder of the Welsh Mines Society in 1979, from which was born the Welsh Mines Preservation Trust in 1991, who have worked closely with Cadw and the Royal Commission (RCAHMW) over the years to help preserve and record these forever decaying mines.
- Archaeological work at the Cwmystwyth Mines has been very extensive over the years with key published works written by David Bick in the mid 1970s with his *Metal Mines of Mid Wales* series, Simon Hughes, with his invaluable *The Cwmystwyth Mines* (1981 and 1993) and Simon Timberlake with his survey and investigative works published in 2003 on the results of work undertaken at Copa Hill between 1986 2002 and subsequent other investigative works. Other survey work has also been undertaken by Robert Protheroe-Jones, Curator of Heavy Industry at the National Museum of Wales, in 1993 as part of a larger Ceredigion metal mines survey. As well as surface surveys over the decades, members of the Cambrian Mines Trust and the Welsh Mines Preservation Trust and others have surveyed and planned sub surface remains accessed through the profusion of adits and shafts across the site. This sub surface exploration work has revealed an extraordinary level of preservation from continuous mining at the site from the Bronze Age up to 1950 when the mine was finally abandoned.
- Archives of information on the mine are held by the RCAHMW including numerous photographs (both site shots and aerial photographs); site surveys carried out by RCAHMW and Lampeter University in 1993; newspaper cuttings; and other archaeological reports prepared for the site. Other studies related to the site commissioned by the RCAHMW include the Upland Initiative Cwm Ystwyth Cwm Mwyro Archaeological Survey by Trysor.
- 6.100 The Dyfed Archaeological Trust Historic Environment Record (HER) also holds numerous photographs of the site and copies of the majority of reports written on the mines. The HER also holds copies of all of the individual records made for the site through the Metal Mines surveys by Robert Protheroe Jones.
- 6.101 Former projects on the archaeology and history of the area, including Cwmystwyth, include the

work done for The Spirit of the Miners project through Ceredigion County Council and Countryside Council for Wales (now Natural Resources Wales).

6.102 As well as surveys and groundwork investigations, following the procurement of the mine by the Cambrian Mines Trust in 2013, Cadw and Ceredigion County Council (through Cynnal Y Cardi) provided funds for the development of a Management and Protection Plan for the site to develop ideas being put forward by the Cambrian Mines Trust in their 'A Way Ahead' document. This Plan was developed by DAT Archaeological Services in partnership with the Cambrian Mines Trust (DAT Report 2013/77). It included consultation and input from members of Cadw, Ceredigion County Council, Natural Resources Wales and Dyfed Archaeological Trust. Further consultation was also undertaken with ecological specialists and mining historians. The following is a copy of the summary of this management and protection plan.

"Through this Plan, the aspirations of the Cambrian Mines Trust are considered as a series of works which should be undertaken in the future for the positive benefits of the site and its future protection. These included erection of signage stating what the site is and that it is owned by the Cambrian Mines Trust; interpretation boards (website and information leaflets) providing information on the significance of the site in terms of archaeology, ecology and geology, as well as the dangers of such sites to visitors; visitor management through improved parking and a defined footpath; management of the Nant y Gwaith stream course to prevent further erosion and reduce pollution; and consolidation and repair to the impressive portals to Level Fawr and Taylor's Level; management and improvement of access to below ground workings for surveyors, experienced mine explorers and researchers. These improvements are considered as the first Phase of a larger project to improve access and management of the site. This part of the Plan also discussed potential partners in the delivery of these project elements

The plan discusses a second Phase of works at the site which should consider the longer term sustainability and management of the site area. This could include the development of a hydro-electric scheme built in a very similar location to the one that was used over 100 years ago at the site. The income generated from the scheme could be used to reinvest in the management of the Cwmystwyth Mines site. Further remediation and consolidation of other structures at the site, above and below ground, is also necessary as is continued research and recording of the archaeology, ecology and geology of the site. The continued promotion and education of visitors and school children to the area is also essential to ensure the site does not get neglected.

A range of potential funding sources are discussed within this plan for which the proposed works at Cwmystwyth would qualify for consideration, which include such sources as the Cefn Croes Wind Farm Community Trust Fund, the Esmee Fairburn Trust and the Heritage Lottery Fund.

The Plan also considers the various consents and permissions that will be needed to undertake any works at the site, such as Scheduled Monument and SSSI Consents and planning permission. The various designations will require a whole suite of initial surveys of the relevant areas of site and assessment of predicted impacts to be undertaken prior to consents or planning permission being granted. Obtaining the relevant permissions is definitely seen as possible as long as dialogue is continued during all stages of development and delivery of the eventual project, between the Cambrian Mines Trust and the various governing bodies. A list of relevant contacts has been provided, all of whom were consulted during the production of this document.

The Plan emphasises that the long term sustainability of the site must be considered in terms of being able to generate some form of income that can be used for future maintenance, repair and recording. The site provides further research opportunities into the environment (archaeology, ecology, geology, pollution) and future schemes of recording may come through the funding of such research "(DAT Report 2013/77)

#### 6.103 Unknown Periods

- 6.104 There are no unknown period sites within red line study area.
- 6.105 Within the 1.5Km wider landscape there is only one site of unknown period recorded within the HER database (PRN: 42137). This is a small structure on Glog, an alignment of stone blocks

running NE off boundary wall for 4m. 3 large blocks run SW-NE, a fourth forms L-shape. Maybe the remains of a hut or sheepfold destroyed to build a wall.

#### **6.106 Cartographic Sources** (see Figures 17 - 30)

- 6.107 William Waller's Map of 1704 (see Figure 17)
- 6.108 The valuable feature of the William Waller maps of the Cwmystwyth 'Great Lead Mine' are his depictions of the mine building in the late 17th century on Copa Hill, which clearly show the stamping mill, store houses and the smiths forge and the description of the main adit. The other illustration of the new Cwmystwyth mine shows the new adit and level probably the Nantrefach Level
- 6.109 OS Surveyors Drawing (1820)
- 6.110 This early preliminary survey undertaken by the Ordnance Survey shows the Cwmystwyth lead mines marked with a series of mining structures at the base of Graig Fawr. At the time of this map Joseph Jones was leasing the mine from William Powell. The previous lessee had been Thomas Bonsall.
- 6.111 Llanfihangel y Creuddyn Parish and Gwnnws Tithe Maps (1847)
- 6.112 The Ystwyth River marks the boundary between the two parishes of Llanfihangel y Creuddyn and Gwnnws, with Llanfihangel y Creuddyn being on the north side and Gwnnws to the south. Both these tithe maps are dated 1847 which is relatively late when compared to other tithe maps in the old county of Cardiganshire.
- 6.113 The Llanfihangel y Creuddyn map clearly marks a series of structures below Graig Fawr, but fails to actually denote the fact on the map that these structures are mine related and they are only marked as No.66. Examination of the tithe map however reveals that these buildings along with Tynddol and Nantryonen were tenanted by James Raw but owned by the Earl of Lisburne of the Vaughan family whose family seat traditionally was Trawsgoed in Cardiganshire. However, at this time the mine was probably still leased to Abel Gower and one Gregory Walters with John Taylor and sons soon to become lessees in 1848.
- 6.114 The land to the west of the mine, the red line area (WEST), shows that much of this area was pasture land with the Pentre Mill to the far west end. Interestingly the tithe map clearly shows an area of tipped waste (No, 73) below Penparc (No.71) where a level was sunk on the other side of the main track. The field in which this tip is located was known as Cae Ucha Tanyffordd.
- 6.115 The Gwnnws parish tithe of 1847 shows the area of the South Cwmystwyth Mines, marked as No. 998 and 999. This land was owned and tenanted by Thomas Jenkins. The cottage and garden was called Henparc and the surrounding land is described as pastureland. No mine workings are shown on the tithe map at this time.
- 6.116 *OS First Edition Map (1887)*
- 6.117 By the time of the OS First Edition Map of 1887 the Cwmystwyth Mines were in the hands of John Taylor and Sons and at this time the mine output had been suffering immensely following a bad winter and severe droughts. This map series clearly shows the division between the Pugh's mine workings and the Kingside workings with an extensive leat system already in place between the two mines. Also shown is the remains of the former South Cwmystwyth Mine at Hen Parc. The western red line area clearly shows a series of mining levels at the base of Glog and the Pentre Mill complete with Mill Race,
- 6.118 OS Second Edition Map (1906)
- 6.119 The OS Second Edition Map of 1906 shows a dramatic change in the mine complex at the Cwmystwyth mine. At this time Henry Gamman had already been the lessee since 1900 and had already erected a new dressing mill on the site of the former Taylor and Sons who had already also installed a tramway system and a new leat system. The power sources were now primarily hydraulic with turbines set alongside the Nant Watcyn. Gamman was also responsible for the creation of a tennis court built for his daughter Isabel, and staff welfare with the construction of Neville Place

- 6.120 To the west very little has changed from the earlier OS 1887 map in the area of Pentre, apart from the addition of a number of other now disused mining level above Penparc, suggesting that the Pentre mine was abandoned at some time between these years 1887 1906.
- 6.121 OS 1953 Edition Map
- 6.122 By 1953 the mine at Cwmystwyth had already been abandoned since 1950, but the mine had already come to a virtual standstill by the start of WW2. As such this map series shows very little change from the earlier 1906 map and essentially shows the mine almost at the point of abandonment..

#### 6.123 Site Visit

- 6.124 The site visit to the Cwmystwyth Mine and the area west was a rapid survey only, looking at the general present condition of the site and its extant remains. Since the survey by David Bick in the mid 1970s and Simon Hughes in the early 1980s, many of the standing remains have been either dismantled or have been reduced in height for safety reasons. The key standing structures today include the No.1 Crusher Mill positioned between Pugh's Adit and Gill's Lower on the south side of the road, the lower foundations of Neville's Place and Old Place, the former Dressing Mill floor and ore bins constructed by Henry Gamman on the foundations of the earlier dressing mill built during John Taylor's residency, the Cwrt office building, the old mine offices and the compressor house foundations positioned northwest of the dressing mill. As well as these key structures, the site is also covered across the entire complex by the remains of retaining walls, cobbled waterways, other smaller foundations, the route of the tramway inserted by the Taylor's and the system of leats. Further still the entire designated area is punctuated by eighty-four known adits, shafts and levels, the most well known and easily accessible being Pugh's Adit, Kingside Shaft Level Fawr and Taylor's Adit. The mine site is covered extensively in waste tips.
- 6.125 Since the mines abandonment in 1950 the mine has inevitably suffered from general erosion and lack of management as well as the robbing of building stone from standing remains and the removal of waste tips the material being used for hardcore. The site has also been used for waste tipping of domestic appliances and even cars, an old car from the 1980s occupying the Kingside Shaft opening. However, although the surface of the site has suffered immensely over the decades, it is only now since it was designated a scheduled monument and its purchase by the Cambrian Mines Trust (CMT) that the site is beginning to having some protection. Since its purchase by the CMT in 2013, fencing has been erected around the majority of the mines standing remains, but there is a desperate need to start recording and consolidating the standing structures. This need has also been expressed by the CMT in their 'wish list', along with the need to install proper information panels about the site. Presently the only information panels about the site are positioned at either end of the mine complex along the main road and are in need of upgrading and need to have a focus more on the history and archaeology of the site rather than purely on the geology of the area. A copy of the CMT 'wish list' has been included here in Appendix IV.
- In terms of river pollution, the area of the outflow from Pugh's Adit is an obvious area of concern. Here the outflow from the adit flows into the river at two points marked by the orange colour of the iron ferrous oxide. Further upstream the outflow from Lower Gill's at the time of the site visit was nil. However, it was plain to see that polluted water was leaching continuously from the waste tips into the river, although not orange in colour the presence of algae indicators suggested metal pollutants. Given that the area of the Cwmystwyth mine is a designated site the HER database has a comprehensive record of each of the significant structures and features for the mine including those atop Copa Hill. However, there were a number of features noted from the site visit that haven't been included in any former surveys that do warrant attention, such as areas along the Nant y Gwaith watercourse toward the base of Graig Fawr, where a cobbled surface has been laid in the stream to stop erosion. Also noted were a number of retaining walls not recorded within the HER nor within the National Monument Record (NMR). However, these features may have been noted in other more recent surveys but their examination is beyond the remit of this study.
- 6.127 Outside of the designated area, south of the Ystwyth the site visit and the desk based assessment recorded the existence of twenty (20) other sites and features within the red line area that deserve mention. These sites are predominantly located within the western red line area and

include Penparc, Bwlch-y-gwyn, a waste tip and level at Pentre, field banks, enclosures and boundaries. Other significant features and structures in this area to the west but recorded within the HER include the Pentre Office and the Pentre Mill complete with Mill Race. A the far west end of the red line area the site visit and desk based work recorded the site of Ty'n y Ddol, a number of field boundaries and a water well.

HRSW No.	Site TYPE	Source	Condition
1	LEVEL	OS 1st Ed 1886 Map	Still present
		•	·
2	FIELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
3	WASTE TIP	OS 1st Ed 1886 Map	Still present
4	FIELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
5	FIELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
6	PEN-Y-PARC WELL	OS 1st Ed 1887 Map	Unknown
7	FIELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
8	BWLC-Y-GWYN	OS 1st Ed 1887 Map	Still present
	HOUSE		
9	PEN-Y-PARC	Llanfihangel y Creuddyn Tithe	Still present
	HOUSE	Map 1848	
10	FIELD BANK	Llanfihangel y Creuddyn Tithe Map 1848	Still present
11	FIELD BANK	Llanfihangel y Creuddyn Tithe Map 1848	Still present
12	FIELD BANK	OS 1st Ed 1887 Map	Still present
13	FIELD BANK	OS 1st Ed 1887 Map	Still present
14	FOOTPATH	OS 1st Ed 1887 Map	Still present
15	LINEAR FEAURE	OS 1st Ed 1887 Map	Still present
16	FIELD BANK	OS 1st Ed 1887 Map	Still present
17	BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
18	BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Still present
19	TY'N-Y-DDOL FARMSTEAD	Llanfihangel y Creuddyn Tithe Map 1848	In use
20	WELL	OS 1st Ed 1887 Map	Unknown
21	FELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Absent
22	FELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Absent
23	FELD BOUNDARY	Llanfihangel y Creuddyn Tithe Map 1848	Absent

# **7** Significance of Remains

7.1 In its entirety, the Cwmystwyth Mines are a palimpsest of mining activity from the Bronze Age through to the mid 20th century and as such it is an extraordinary site with exceptional preservation both on the surface and below ground, the subterranean levels all too often forgotten and as such only explored by devout and passionate explorers.

- The significance and importance of the site in terms of archaeology and cultural heritage terms 7.2 cannot be over stated. This is the reason why the area was given scheduled status in 1985. The monument is of national importance for its potential to enhance and illustrate our knowledge and understanding of mining technology from the Bronze Age and as such it represents one of the earliest and best studied known metal mining sites in the British Isles. The site also has a very rich history, in that it is referenced as far back as the 13th and 14th century when the land was in the hands of the Cistercian Monastery at Strata Florida. Following the medieval period the mine, particularly Copa Hill, was the focus of intense mining by the Crown and following the passing of the Mines Royal Act in 1693, the mine was continually leased to the Company of Mine Adventurers with notable historic characters including William Waller, Sir Humphrey Mackworth and the Powell family of Nanteos. In the 18th Century historical figures such as Chauncey Townsend and Thomas Bonsall, both significant characters in the history of lead mining in mid Wales. In the 19th century notable lead mining figures such as Thomas Pugh and John Taylor who were responsible for much of the remains of the Cwmystwyth mines as we see them today. In the 20th century the key figure was Henry Gamman who was responsible for bringing some welfare to the Cwmystwyth mines. Each of these historical figures and events are embedded in the shape of the surface and sub surface remains of the Cwmystwyth Mines as seen today.
- 7.3 The below ground remains of the 17th 20th century mine are very impressive and well preserved, as is evident from the explorations undertaken by mine explorers over the decades and in particular the Welsh Mine Preservation Trust. The underground features and artifacts are all too often forgotten generally as they are hidden from view and hard to explore safely without proper equipment and training. However, these underground workings are exceptional heritage assets and such consideration must also be given to their preservation and recording.
- 7.4 The significance of the site is also demonstrated by the fact that it is positioned within a Special Conservation Area and a Specially Protection Area and two SSSI's.
- Given that the Cwmystwyth Mines and all of the features and structures within its area are very significant, of High Value and as such an important heritage asset, the protection and preservation of what extant remains there are will be a principal consideration in any future remediation design proposals. As such, any potential development will have to do its utmost to avoid any significant direct impact to any known surface and sub-surface remains. Any potential development should also consider the preservation of any existing vistas to and from the site that may have an in-direct effect on the setting and appreciation of the mine as a whole. Naturally this will depend on the scale of any proposed remediation works and whether the final scheme will be visible on the surface. Also, further consideration should be given to the potential impact on the setting on any standing structures. If there is any impact on any of these structures, features associated with the mine and the mine itself, then appropriate mitigation should be put in place. Because the site is positioned entirely within a designated area, then any remediation design proposals will have to be accompanied by a scheduled monument consent application, to include detailed plans and a full desk based assessment following consultation with Cadw.
- 7.6 Regarding the red line area immediately south of the main area of the mine, on the south side of the Ystwyth, this area is occupied by the remains of the South Cwmystwyth Mine that was started in the 1870s by one John Kitto, but the venture was short-lived and was not successful. The surface remains at this site are fairly extensive in that they extend over a fairly large area with levels and banked linear features forming much of what remains. Unfortunately there are no standing structures at this mine. However, further west are the runs of the deserted farmstead of Hen Parc. Although the remains of the South Cwmystwyth Mine and Hen Parc are not within the designated area, they are still very significant remains in terms of the history of the immediate area south of the Cwmystwyth Mine. In fact the South Cwmystwyth Mines also share a history with the Cwmystwyth Mine in the late 19th century in that they were in operation at the same time and in view of each other. Any proposed remediation development will have to do its utmost to avoid any significant direct impact to any known surface and sub-surface remains. Any potential development should also consider the preservation of any existing vistas to and from the site that may have an in-direct effect on the setting and appreciation of this mine as a whole. If there is any impact on any of these structures, features associated with the mine and the mine itself, then appropriate mitigation should be put in place.
- 7.7 Further to the west of the mine, the area that could potentially be used to install a new pipeline and treatment works, the assessment has shown that much of the area immediately west of Bwlch-y-gwyn and Penparc as used as part of the Pentre Mine, with the remains of levels and a

waste tip. Further west still are the remains of a series of boundary banks and a mill race at Pentre Mill. All of these features are Medium Value sites. However, the history of the Pentre Mine is believed to go back to the 17th century and as such the significance of the Pentre Mine features should be considered carefully in any remediation design.

7.8 The far east end of the red line area is occupied by the dwellings of Nant Watcyn and Ty'n-y-ddol and a series of field banks. None of these sites are within the designated area and are Medium Value sites. However, although all of the surface remains are marked on the early tithe map of 1848 and the later OS maps of 1187 and 1906, because of the excavation of a Bronze Age grave complete with a gold artifact found by Simon Timberlake and team in 2002 there is always a chance that other buried remains of the same period are present in the area below Graig Fawr.

## 8 Archaeological Constraints

8.1 With the results of the desk-based assessment and the site visit, a map of the red line feasibility study area has been produced showing zones or areas of archaeological sensitivity or constraints (see Figures 48 and 49). These figures identify zones or areas of low (yellow), medium (blue) or high (red) archaeological sensitivity where there are both significant known sites/areas as well as the potential for buried remains. These figures may be used to inform the detailed design stage of the any proposed remediation works. For the entire area of the Cwmystwyth Mine on the northern side of the Ystwyth River, the high sensitive area reflects the boundary of the Scheduled Monument area (CD145).

## 9 Development Considerations

9.1 Depending on the design and scale of any potential remediation work on the site, there are a number of development concerns that should be taken into consideration at the design stage.

#### 9.2 i) Scheduled Monument Consent

- 9.3 Section 2(2) of the Ancient Monuments and Archaeological Areas Act 1979 states that consent must be obtained for the following:
  - any works resulting in the **demolition** or **destruction** of or any damage to a scheduled monument;
  - any works for the purpose of **removing** or **repairing** a scheduled monument or any part of it or making any **alteration** or **addition** thereto;
  - any **flooding** or **tipping** operations on land in, on or under which there is a scheduled monument.
- 9.4 Where a structure is both listed and scheduled, scheduled monument consent takes precedence over listed building consent. Any work at a scheduled monument which requires planning permission, will also need to obtain both planning permission and scheduled monument consent. Planning permission alone is not sufficient to authorize the works.
- 9.5 Certain works can be carried out without the need to apply for scheduled monument consent. These are called class consents. However, in certain circumstances, the Welsh Assembly Government can withdraw this consent by the issue of a direction. If this is done, scheduled monument consent would have to be obtained in the normal way. Close consultation with Cadw regarding scheduled monument consent will be necessary.
- 9.6 Where any planning application is submitted for works within a scheduled area, the local authority will consult with Cadw to ensure that the proposals have also obtained SMC and that any conditions placed upon that consent are complied with.
- 9.7 Any planning permission granted for activities within a SAM (once SMC has been obtained) will also have archaeological planning conditions placed upon it.

#### 9.8 ii) Conservation and Recording Work

- 9.9 Since the purchase of the land from the Crown Estate by the Cambrian Mines Trust in 2013 the Dyfed Archaeological Trust Services (DATs) have drawn up a Management and Protection Plan for the Cwmystwyth Mine for the Cambrian Mines Trust in order to develop ideas being put forward by the Cambrian Mines Trust in their 'A Way Ahead' document (DAT Report 2013/77). The report included consultation and input from members of Cadw, Ceredigion County Council, Natural Resources Wales and Dyfed Archaeological Trust. Further consultation was also undertaken with ecological specialists and mining historians. Below is a series of initial important works proposed by the Cambrian Mines Trust that are generally believed will provide benefit to the site and its future protection.
  - Erection of signage stating what the site is and that it is owned by the CMT (following the site visit, some warning signage has now been erected on the site)
  - Erection if interpretation panels providing information on the significance of the site in terms of archaeology, ecology and geology, as well as the dangers of such sites to visitors.
  - visitor management through improved parking and a defined footpath.
  - management of the Nant y Gwaith stream course to prevent further erosion and reduce pollution.
  - consolidation and repair to the impressive portals to Level Fawr and Taylor's Level
  - management and improvement of access to below ground workings for surveyors, experienced mine explorers and researchers
- 9.10 In terms of longer term sustainability and management at the site, the CMT and the DAT also considered the following actions:
  - the development of a hydro-electric scheme built in a very similar location to the one that
    was used over 100 years ago at the site. The income generated from the scheme could
    be used to reinvest in the management of the Cwmystwyth Mines site.
  - Further remediation and consolidation of other structures at the site, above and below ground, is also necessary as is continued research and recording of the archaeology, ecology and geology of the site.
  - The continued promotion and education of visitors and school children to the area is also essential to ensure the site does not get neglected.
- 9.11 The Plan emphasises that the long term sustainability of the site must be considered in terms of being able to generate some form of income that can be used for future maintenance, repair and recording. The site provides further research opportunities into the environment (archaeology, ecology, geology, and pollution) and future schemes of recording may come through the funding of such research.
- 9.12 A Copy of the CMT 'Wish List' is included in Appendix IV.

#### 9.13 iii) Desk Based Assessment

- 9.14 In order to satisfy current planning policy and legislation, it will be essential to undertake a full desk based assessment and a detailed site walkover of the proposed remediation scheme area and to include the results of this assessment as part of any future environmental statement and planning application. Prior to undertaking this desk based assessment however, Cadw and the Dyfed Archaeological Trust Heritage Management (DAT-HM) section will need to be consulted and a design brief implemented.
- 9.15 The specific objectives of any future desk based assessment will be to:

- Identify the cultural heritage baseline within and in the vicinity of the proposed remediation scheme area;
- Consider the application site in terms of its archaeological and historic environment potential:
- Assess the potential and predicted effects of the proposed development on the baseline cultural heritage resource within the context of relevant legislation and planning policy guidelines; and,
- Propose measures, where appropriate, to mitigate against any predicted significant adverse effects.
- 9.16 The desk based assessment should consist of two main elements:
  - i) An assessment of all Historic Environment Record (HER) and National Monument Record (NMR) sites within at least a 1 - 2km radius from any proposed development area and a site walkover of the application area. The assessment radius will have to be confirmed and agreed with Cadw and with DAT - HM.
  - ii) Direct and In-direct Assessment of predicted effects on all designated and undesignated High Value sites (Scheduled Ancient Monuments, Listed Buildings, Parks and Gardens, Conservation Areas and Historic Landscapes) within the application area and within at least a 1 2km radius (the assessment radius will need to be agreed with the regional archaeological trust DAT -HM).
- 9.17 In view of the above elements, the desk based assessment should consider the following:
  - the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area;
  - the history of the site;
  - the potential impact of the proposed development on the setting of known sites of archaeological importance; and
  - a methodology for non intrusive survey and/or intrusive evaluation to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.
- 9.18 <u>iv) Assessment of the Significance of the Impact of Development on an Historic Landscape</u>
  (ASIDOHL2)
- 9.19 As well as a full desk based assessment, because any potential remediation development will be positioned directly within the Registered Historic Landscape of *Uplands Ceredigion*, an ASIDOHL2 may also need to be undertaken. A guide to good practice on using the Register of Landscapes of Historic Interest in Wales in the planning and development process was published in 2007 by Cadw, Countryside Council for Wales (now Natural Resources Wales) and the Welsh Assembly Government. Whether or not an ASIDOHL2 will be required or not will depend on the scale and design of any remediation proposals and the Dyfed Archaeological Trust Heritage Management (DAT-HM) section and Cadw will need to be consulted.
- 9.20 If, following consultation with Cadw and DAT-HM, an ASIDOHL2 were needed to be undertaken then the results of this assessment should be included as an appendix to any full desk based assessment and will provide essential information to determine the absolute impact of the proposed development on the registered historic landscape area. This ASIDOHL2 will also help to inform any Scheduled Monument Consent (SMC) decision.

### 10 Mitigation

10.1 Where Scheduled Monument Consent (SMC) or SMC and planning permission has been granted the conditions are most likely to require a form of archaeological mitigation is in place prior to or

during the commencement of the proposed works. Such archaeological mitigation could include the following:

- Archaeological assessment undertaken prior to the start of any works, and
  possibly supporting the application for SMC / planning permission. This would
  most likely be required in those cases where significant developments are
  proposed.
- Archaeological / Building survey where alterations are to be carried out to structures or where alterations in ground layout are proposed, initial recording of the structures or ground layout would be required to detail them in their present state prior to any alteration. This could be in the form of topographic, photographic or detailed building recording surveys.
- Archaeological Evaluation prior to the commencement of any proposed works it
  may be necessary to undertake a preliminary survey of the works to determine
  the presence/absence, state of preservation, extent, date, depth and significance
  of any below ground remains. This may take the form of non-intrusive
  geophysical survey (gradiometer or resistivity) or intrusive surveys in the form of
  trial trenching. Both surveys would provide further information on the known
  archaeology, but would also determine the presence of hitherto unknown
  remains. It is considered unlikely that geophysical survey would be required at
  the Cwmystwyth site due to ground conditions, although the method has not been
  tested to determine if it would work metal mine sites.
- Archaeological Watching Brief where archaeological potential has been identified and impacts from the proposals will be slight, or where the archaeological potential is considered low in an area of proposed works, then an archaeological watching brief during the undertaking of those works may be deemed appropriate. This would involve an archaeologist/s being present at the site to observe if any archaeological remains are exposed and if so, the archaeologist would create an appropriate record of those remains. In some cases watching briefs can identify unexpected remains of such significance that a more detailed stage of excavation and recording is necessary.
- Archaeological Excavation in cases where significant archaeological remains
  have been identified by evaluation or during the course of a watching brief,
  detailed excavation prior to the commencement of works (or further works) may
  be necessary. Excavation is the most intensive form of archaeological recording
  and can be very time consuming and costly. The aim of the work is to preserve
  any identified remains through record, in effect removing them from the site to
  allow development to continue.
- Preservation in-situ where identified archaeological remains are of such significance that it is not appropriate that they are disturbed, then preservation insitu would be required. This is the preferred option for archaeological remains, especially in cases where the remains are of national significance (as is the case at Cwmystwyth). Where it can be shown that the works would be beneficial to the longer term preservation and future of the site as a whole, other forms of archaeological intervention may be considered appropriate. The application for and subsequent determination of Scheduled Monument Consent would address such issues.
- 10.2 For the areas outside of the scheduled designated area, the best mitigation for the impact of any development on the archaeological resource is to avoid direct physical impacts upon all known archaeologically significant sites and features. Where avoidance is not considered possible or where the existence, exact location or extent of a feature is uncertain, additional mitigation measures may be required. A number of mitigation measures can be undertaken in advance of a planning application that will both inform, and potentially reduce or remove the need for archaeological mitigation at a later date. A number of these options relevant to this site are

outlined below along with post determination mitigation strategies:

- 10.3 ii) Site Survey
- This would involve a rapid survey of the proposed development area to assess the condition, character and form of known heritage assets as well as to investigate for any unknown heritage assets not already shown on cartographic sources or any other historical documents. This survey work will be informed by a desk based assessment of the site.
- 10.5 Ideally this work should be undertaken pre-determination, but it could be undertaken as a planning condition or post determination before any on-site work commences.
- 10.6 Preservation In Situ or by Record
- 10.7 Preservation in situ is the preferred option for all significant cultural heritage features and can be achieved by avoiding direct physical impact upon known features through careful consideration at the design stage. However, at times this option is not feasible in relation to development proposals, as such preservation by record is the other option.
- 10.8 Evaluation
- 10.9 If there is an unavoidable impact upon a known archaeological site, or where it is uncertain if there will be an impact because the existence, exact location or extent of the or any archaeology is not known, then an archaeological evaluation (before the submission of the development scheme for planning approval) may be advisable in order to assess the presence or absence of archaeological features and their vulnerability from the development. The results of the evaluation can then inform decisions as to whether to re-design the scheme in order to avoid the features or to mitigate the development impact by other means (see 'excavation' below).
- 10.10 Excavation
- 10.11 Where previously identified archaeological features cannot be avoided by the development, or are considered to be of insufficient importance to warrant preservation *in situ*, then 'preservation by record' can be undertaken to excavate and record archaeological deposits before development commences. Such mitigation may also be required as a condition of granting planning consent.
  - ii) Archaeological Watching Brief
- 10.12 Development impact upon sites, or where the absence of archaeological features has not been established by other methods, can be mitigated against by undertaking an archaeological watching brief to record any unforeseen archaeological features that may be encountered during groundwork. This can however, result in delays during groundwork while archaeological recording is undertaken. Depending on the results of any site survey, as part of the planning condition, as a minimum a strict archaeological watching brief should be undertaken where any ground penetration works are proposed for any remediation works.

### 11 Benefits & Opportunities

- 11.1 The Cwmystwyth Metal Mine is an exceptionally significant historic site of national importance. The mine as well as all of the other lead mines in Cardiganshire helped to forge a regional identity in mid Wales. This prolific industry has left a permanent mark on the landscape of the Ystwyth Valley and many other valleys in the former county of Cardiganshire. Given that the same notable characters were involved in the mining process throughout these period and their communities thrived and grew on the mines proceeds, then all the lead mines in Cardiganshire have an associated history. Extraordinary archaeological evidence at Copa Hill suggests that the Ystwyth Valley was mined in the Bronze Age and very probably on a smaller scale in the Roman period and the early Medieval periods. Notable historic figures include the 13th 14th Century Cistercian monks at Strata Florida, Sir Hugh Myddleton in the early 17th Century, William Waller and Sir Humphrey Mackworth in the late 17th Century and Chauncey Townsend, Thomas Bonsall and others in the 18th Century and several other Victorian entrepreneurs in the 19th and early 20th Century. As such the Cwmystwyth Mines have a rich depth of prehistory and history.
- 11.2 The Cwmystwyth Mine and Copa Hill in its entirety is a very valuable heritage asset with

- extraordinary potential, whose protection, preservation and *promotion* should be a principal consideration in any future remediation design proposals.
- 11.3 In accordance with Planning Policy Wales (2018) the Cwmystwyth Metal Mine contributes to our sense of place and identity and adds significantly to regional and local distinctiveness and as such it is a very important economic and social asset both regionally and nationally.
- 11.4 Presently the Cwmystwyth Metal Mine is more often than not used a thoroughfare for visitors heading toward the picturesque Elan Valley and stopping off briefly for a break in their journey. Presently there are no information panels within or around the site other than a geological RIGS information board at the far east end of the site toward Ty'n y ddol and another more historical information board at the entrance to Cwmystwyth village. However, neither of these boards offer the history of the Cwmystwyth Mine the justice or promotion that it deserves considering its long and continuous history from the Bronze Age through to the mid 20th century. Neither do these boards demonstrate enough of the importance of metal mining across mid Wales as a whole and its importance in having forged the foundation of entire villages and communities in the old county of Cardiganshire. Other than these information panels, the promotional history and heritage of the Cwmystwyth Mine seems to be confined to academic research, amateur and professional historians and the work undertaken by mine societies and trusts over the decades.
- 11.5 Given the extremely rich history of the Cwmystwyth Mine and the beauty of the Ystwyth Valley, there is a great opportunity and indeed a necessity to help promote a sense of place and identity and as a result help to add and promote regional and local distinctiveness by utilising the remains of the mine as an educational, economic and social asset.
- Principle suggested short term actions for heritage promotion as part of remediation design within the designated area of the Cwmystwyth Mine:
  - Update and replace existing information panels and offer a more detailed and updated history of the mine to visitors and tourists. This needs to be done through close consultation with the Cambrian Mines Trust, Cadw, Natural Resources Wales, Ceredigion County Council and the Dyfed Archaeological Trust
  - Potential heritage trail along footpaths and trackways taking in principle adits, structures and features, with information boards positioned at key locations through close consultation with the Cambrian Mines Trust, Cadw, Natural Resources Wales, Ceredigion County Council and the Dyfed Archaeological Trust
- 11.7 Long term actions are should be focused on remediation and consolidation of other mining structures at the site, above and below ground. This is necessary as it will offer continued research and recording of the archaeology, ecology and geology of the site.
- 11.8 The continued promotion and education of visitors and school children to the area is also essential to ensure the site does not get neglected.

### 12 Conclusions & Recommendations

- 12.1 The feasibility study on the heritage and archaeology of the Cwmystwyth Mine has assessed that the area is principally positioned with the Registered Historic Landscape of *Uplands Ceredigion*. The whole mine site is a scheduled monument and therefore any remediation proposals will be governed by scheduled monument consent, as such all features associated with the mine are high value heritage assets.
- As well as being within a scheduled area, the site is also within a designated Special Protected Area (SPA), a Special Area of Conservation (SAC) and set within two Sites of Special Scientific Interest (SSSI).
- 12.3 The readily available literature, cartographic sources, the Historic Environment Record (HER) and some of the material in the National Monuments Record (NMR) and the site visit, have shown that the site is of enormous importance with significant extant remains, both above ground and below, that span over 4000 years of activity on the site, from the Bronze Age to the mid 20th Century. There are eighty-four known adits, shafts and levels at the Cwmystwyth Mines

(HUGHES 1981) with associated waste tips, structures, leats and tram systems and because of this the mine complex covers a very extensive area from river level to Copa Hill at 526m AOD. In terms of ore output, more than 30 different mineral veins have been worked here, the two principal ones being the Kingside and Comet Lodes (including their various branches), the third most important being Michell's.

- 12.4 The mine has a very rich history, being referenced as far back as the 13th and 14th century when the land was in the hands of the Cistercian Monastery at Strata Florida. Following the medieval period the mine, particularly Copa Hill, was the focus of intense mining by the Crown and following the passing of the Mines Royal Act in 1693, the mine was continually leased to the Company of Mine Adventurers with notable historic characters including William Waller, Sir Humphrey Mackworth and the Powell family of Nanteos. In the 18th Century historical figures such as Chauncey Townsend, and Thomas Bonsall, both significant characters in the history of lead mining in mid Wales. In the 19th century notable lead mining figures such as Thomas Pugh and John Taylor who were responsible for much of the remains of the Cwmystwyth mines as we see them today. In the 20th century the key figure was Henry Gamman who was responsible for bringing some welfare to the Cwmystwyth mines. Each of these historical figures and events are embedded in the remains of the Cwmystwyth Mine landscape, both above and below ground.
- 12.5 The below ground remains of the 17th 20th century mine are very impressive and well preserved, as is evident from the explorations undertaken by mine explorers over the decades and in particular the Welsh Mine Preservation Trust. The underground features and artifacts are all too often forgotten generally as they are hidden from view and nigh on impossible to explore without proper equipment and training. However, these underground workings are exceptional heritage assets and as such consideration must also be given to their preservation and recording.
- 12.6 Given that the Cwmystwyth Mines and all of the features and structures within its area are significant and High Value, therefore a valuable heritage asset, the protection and preservation of what extant remains there, will be a principal consideration in any future remediation design proposals. As such, any potential development will have to do its utmost to avoid any significant direct impact to any known surface and sub-surface remains. Because the site is positioned entirely within a designated area, then any remediation design proposals will have to be accompanied by a scheduled monument consent application, to include detailed plans and a full desk based assessment following consultation with Cadw.
- 12.7 Regarding the red line area immediately south of the main area of the mine, on the south side of the Ystwyth, this area is occupied by the remains of the South Cwmystwyth Mine that was started in the 1870s by one John Kitto, but the venture was short-lived and was not successful. The surface remains at this site are fairly extensive in that they extend over a fairly large area with levels and banked linear features forming much of what remains. Unfortunately there are no standing structures at this mine. However, further west are the runs of the deserted farmstead of Hen Parc. Although the remains of the South Cwmystwyth Mine and Hen Parc are not within the designated area, they are still very significant remains in terms of the history of the immediate area south of the Cwmystwyth Mine and they share a history with the Cwmystwyth Mine. Any proposed remediation development will have to do the utmost to avoid any significant direct impact to any known surface and sub-surface remains.
- 12.8 Further to the west of the mine, the area that could potentially be used to install a new pipeline and treatment works, the assessment has shown that much of the area immediately west of Bwlch-y-gwyn and Penparc as used as part of the Pentre Mine, with the remains of levels and a waste tip. Further west still are the remains of a series of boundary banks and a mill race at Pentre Mill. All of these features are Medium Value sites. However, the history of the Pentre Mine is believed to go back to the 17th century and as such the significance of the Pentre Mine features should be considered carefully in any remediation design.
- 12.9 The far east end of the red line area is occupied by the dwellings of Nant Watcyn and Ty'n-y-ddol and a series of field banks. None of these sites are within the designated area and are Medium Value sites. However, although all of the surface remains are marked on the early tithe map of 1848 and the later OS maps of 1187 and 1906, because of the excavation of a Bronze Age grave complete with a gold artifact found by Simon Timberlake and team in 2002, there is always a chance that other buried remains are present in the area below Graig Fawr.

- 12.10 Within the wider 1.5 Km study area the study recorded the locations of only five (5) Grade II listed buildings, but none are positioned within the red line boundary, the closest listed building being positioned approximately 150m north of the westernmost end of the red line area (WEST).
- 12.11 Other than the Cwmystwyth Mine itself, the only other nearest Scheduled Monument is a Chain Bridge and Gothic Arcade (CD172) at the east end of the Hafod Estate, which is a Registered Park & Garden which itself is positioned 1.2 Km west of the red line area.
- 12.12 Potential direct Impacts of Development
- 12.13 It is predicted that any proposed remediation work that involves penetrative groundwork of any kind within the designated area of the mine complex will require Scheduled Monument Consent, given that any work in the designated area will have a direct impact on known and unknown subsurface archaeological remains, features and deposits that are of National importance. As such any remediation design will need to carefully consider the location of known mining features and structures as well as consider the possibility that there could very well be buried remains associated with the mine or other earlier features. It will also have to consider avoiding damage to any existing spoil heaps of any period. Any proposed planning application will need to be accompanied by detailed plans and reports describing the proposals including a full desk based assessment detailing any predicted impacts along with mitigation proposals and justifications for the proposals along with a series of alternative designs in accordance with Scheduled Monument Consent.
- 12.15 Considering the prehistoric, historic and archeological character and nature of the designated area and the immediate surrounding landscape, the chances of significant archaeological remains becoming exposed from any groundwork within the red line area, is considered to be high.
- 12.16 Once Scheduled Monument Consent (SMC) or SMC and planning permission has been granted, any conditions will require that a form of archaeological mitigation is in place prior to or during the commencement of the proposed works. This may take the form of a detailed site survey of the mine complex and/or a program of detailed building recording to Level 4 equivalent, prior to any areas where remediation works are to be undertaken. Close consultation with Cadw, the Dyfed Archaeological Trust Heritage Management, the Cambrian Mines Trust, the Welsh Mines Preservation Trust, National Resources Wales and Ceredigion County Council will need to be continually maintained.
- 12.17 A full desk based assessment as part of an EIA will need to be undertaken once a suitable remediation design has been approved, in order to assess the full impact of any proposals. As part of this study an Assessment of Significance of Impact of Development on Historic Landscape (ASIDOHL2) may also need to be undertaken. This ASIDOHL2 will have to assess the potential impact on the Uplands Ceredigion registered landscape taking into account all High Value and Medium value sites. However, this will depend on the scale and design of any remediation proposals and Cadw and the Dyfed Archaeological Trust Heritage Management section, will need to be consulted regarding this consideration.
- 12.18 The desk based assessment will also have to consider all undesignated sites south of the mine and all those to the west in the area of the Pentre Mine etc. This will entail a walkover survey of red line area (WEST) following remediation design.
- 12.19 Potential In-direct Impacts of Development
- 12.20 As well as the potential direct impact on any known and unknown undesignated sites within the red line study area, depending on the scale and design of the proposed remediation works, there may also be a number of potential indirect effects on the setting of the Cwmystwyth Mine as a whole as well as individual standing structures, adits and shafts etc. As well as this there are also a number of listed buildings within the 1.5 Km from the red line study area.
- 12.21 In view of the proximity of the potential development works to designated and undesignated sites, any large scale proposals may have a significant In-direct effect on their setting. As well, any proposed development may also have a significant indirect effect on the Registered Historic Landscape of Uplands Ceredigion and as such there may be a need to undertake an Assessment

of Significance of Impact of Development on Historic Landscape (ASIDOHL2). A guide to good practice on using the Register of Landscapes of Historic Interest in Wales in the planning and development process was published in 2007 by Cadw, Countryside Council for Wales (now Natural Resources Wales) and the Welsh Assembly Government. Whether or not an ASIDOHL2 will be required or not will depend on the scale and design of any remediation proposals and the Dyfed Archaeological Trust - Heritage Management section and Cadw will need to be consulted.

- 12.22 As well, in view of the proximity of the potential development works to the designated Registered Park & Garden (RPG) of Hafod, any large scale proposals may have a significant In-direct effect on its setting. Therefore this RPG will also have to be considered within any future EIA.
- 12.23 Since the purchase of the land from the Crown Estate by the Cambrian Mines Trust in 2013 the Dyfed Archaeological Trust Services (DATs) have drawn up a Management and Protection Plan for the Cwmystwyth Mine for the Cambrian Mines Trust. A series of short term important works have been proposed by the Cambrian Mines Trust. These include the erection of signage and information panels, improved parking and footpaths, management of water courses to prevent erosion and reduce pollution, the consolidation and repair of a number of adit frontals (Level Fawr and Taylor's Level) and the management and improvement of access to below grounds for research and recording.
- 12.24 The CMT's long term sustainability and management at the site includes: the development of a hydro-electric scheme at the site in a similar position to the former hydro works used at the site over 100 years ago during the time of John Taylor; further remediation and consolidation of mining structures at the site, above and below ground, and; the continued promotion and education of visitors to the site.
- 12.25 In accordance with Planning Policy Wales (2018), given the extremely rich history and prehistoric origins of the Cwmystwyth Mines, there is a great opportunity as part of the remediation process to help further promote a sense of place and identity and as a result help to add and promote regional and local distinctiveness by utilising the remains of the mine as an educational, economic and social asset in conjunction with Cadw, Natural Resources Wales, Ceredigion County Council, the Welsh Mines Preservation Trust and the Cambrian Mines Trust. As well as helping to preserve and protect this exceptional site for the Nation, the continued promotion and education of the site should play a crucial role in any future conservation and management plan.

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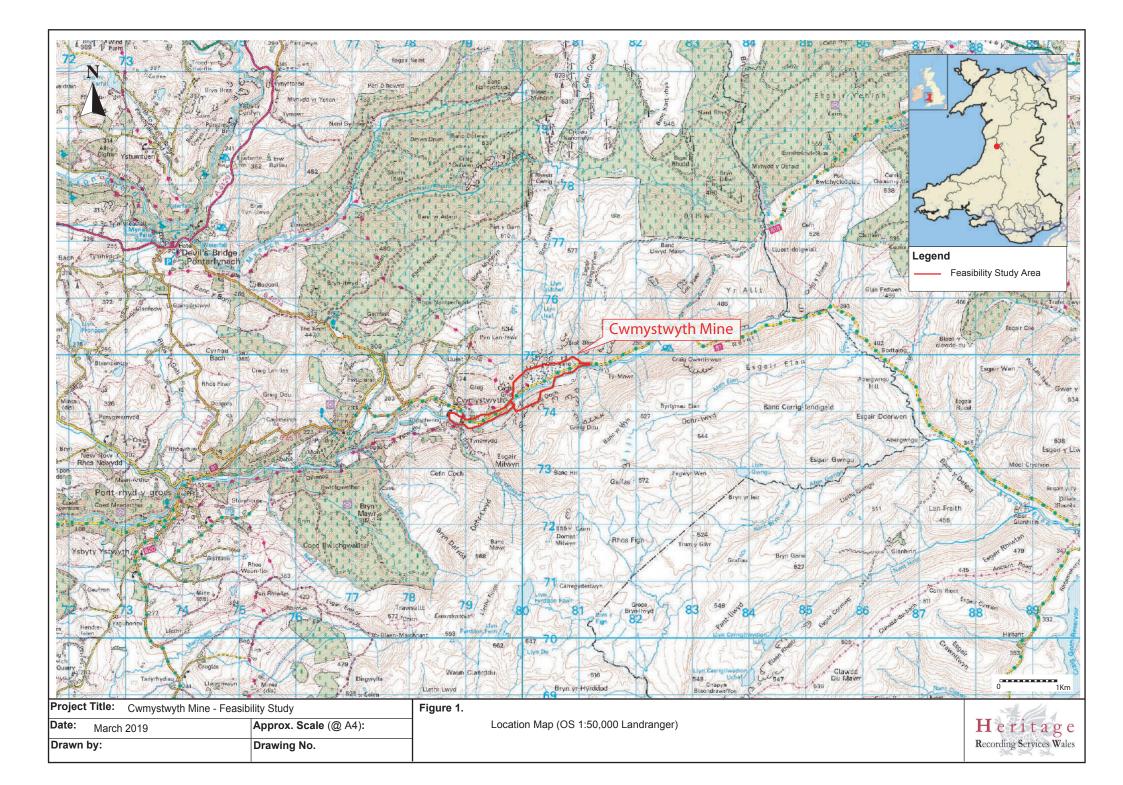
Conservation of Habitats and Species Regulations 2010

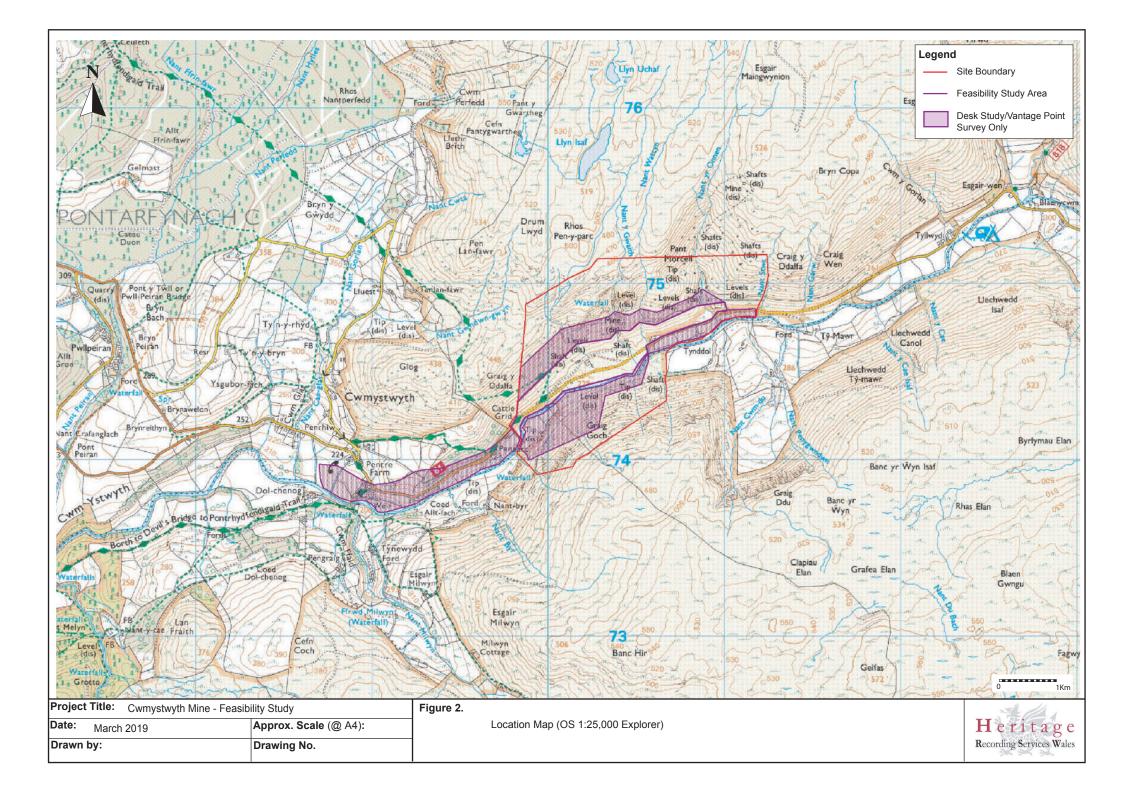
#### Cartographic Sources

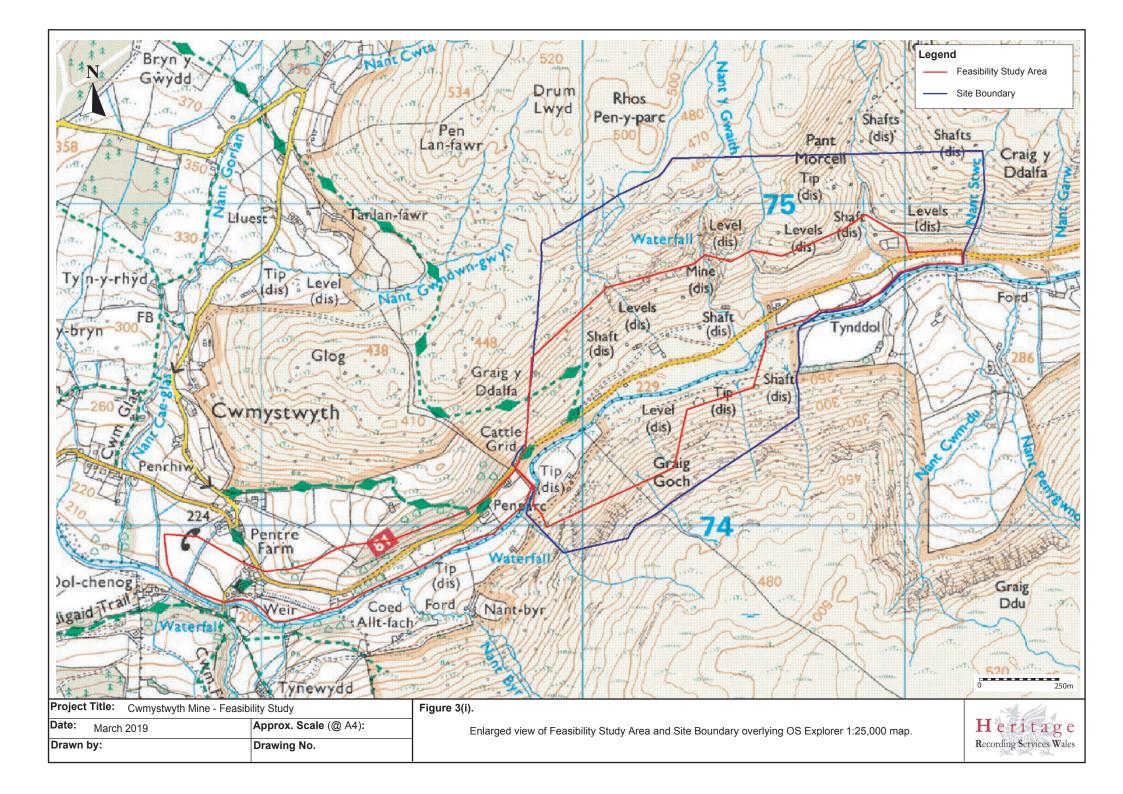
- William Waller's map of 1704
- OS Surveyors Drawing (1820)
- Llanfihangel-y-Creuddyn parish Tithe Map and apportionment details(1847)
- Gwnnws parish Tithe Map and apportionment details (1847)
- Ordnance Survey 1<sup>st</sup> Edition map of 1887 (1:10560);
- Ordnance Survey 2<sup>nd</sup> Edition map of 1906 (1:10560);
- Ordnance 1953 (1:10560);
- Ordnance Survey 2018 (Landranger)
- Ordnance Survey 2018 (Explorer)

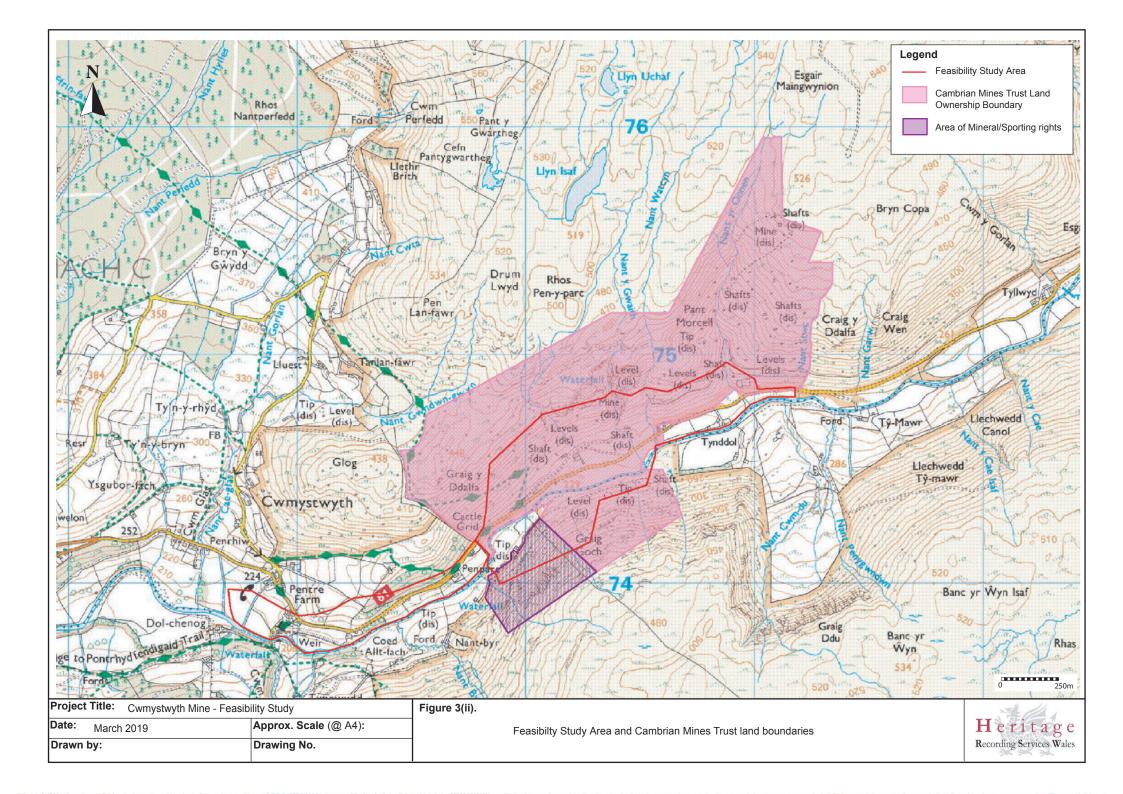
# **APPENDIX I:**

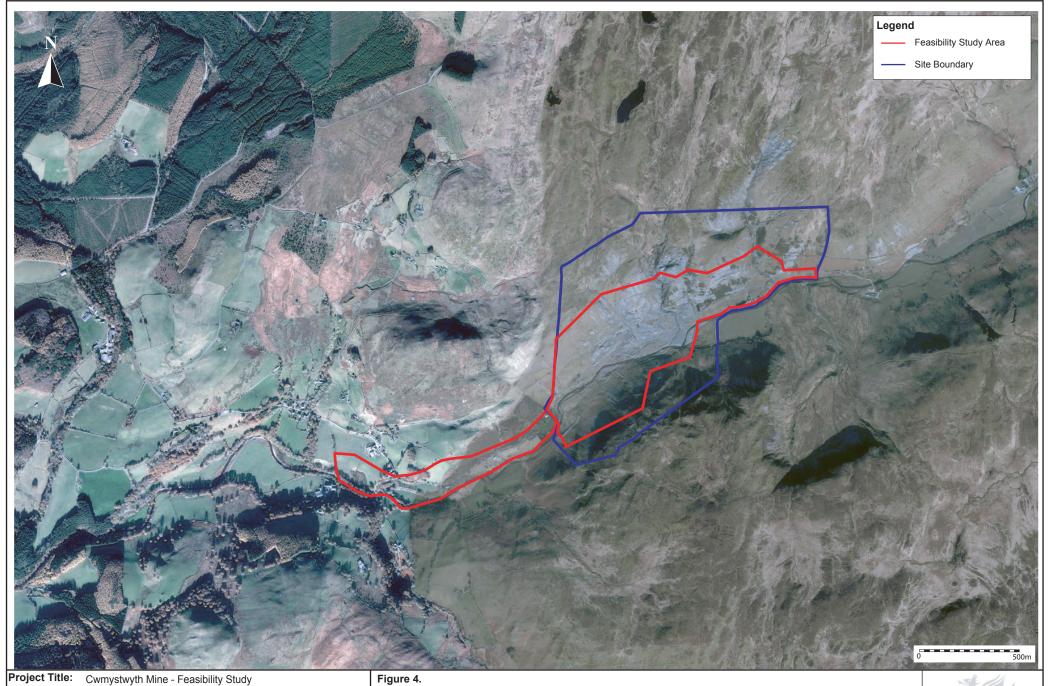
Figures & Illustrations











Project Title: Cwmystwyth Mine - Feasibility Study

Date: March 2019 Approx. Scale (@ A4):

Drawn by: Drawing No.

Feasibility Study Area and Site Boundary overlying OS Aerial Photo (2016).



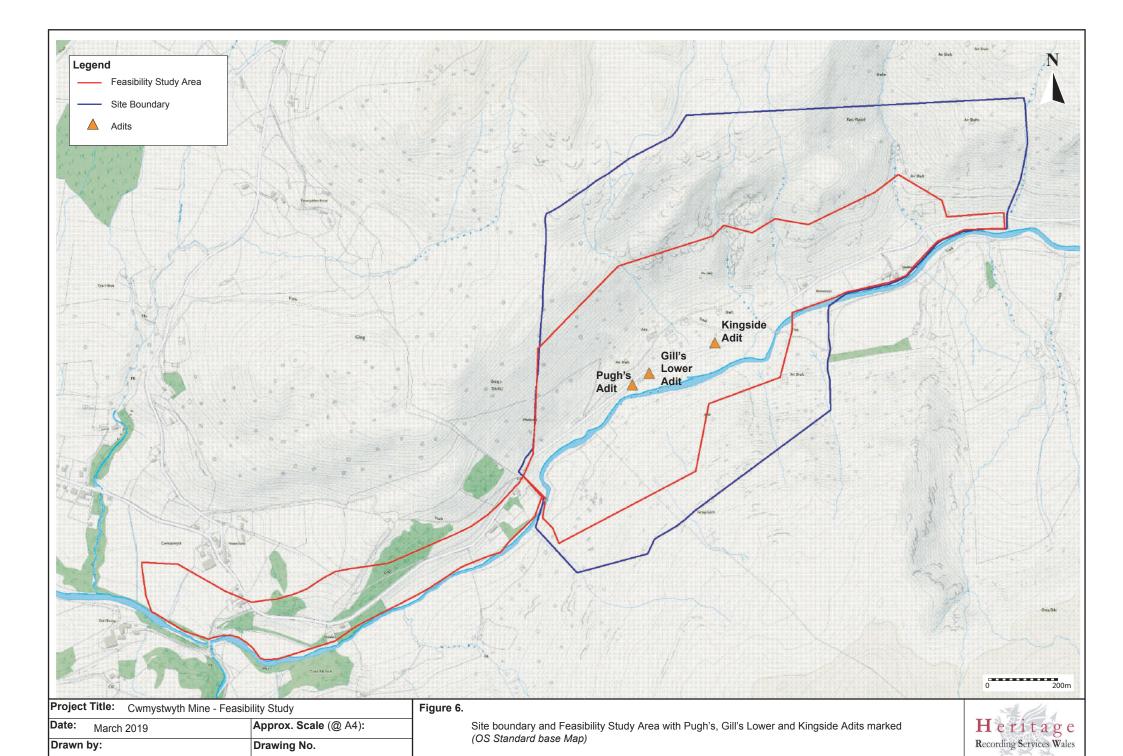


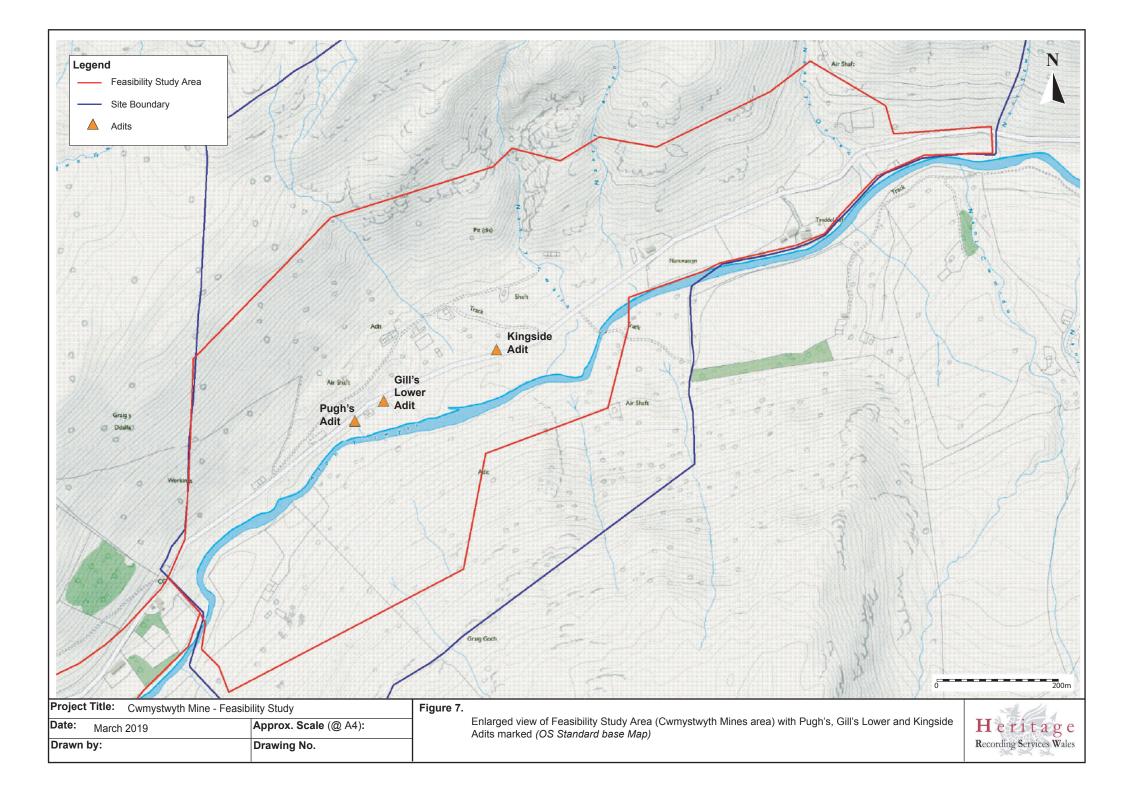
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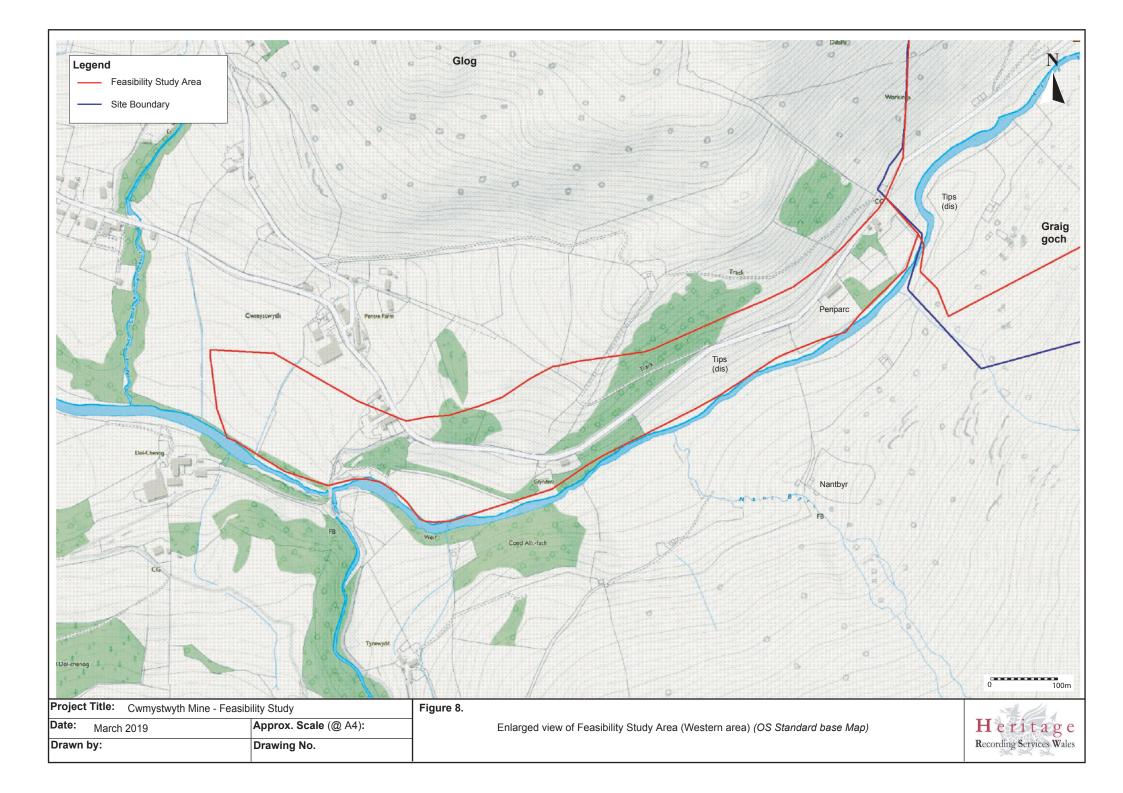
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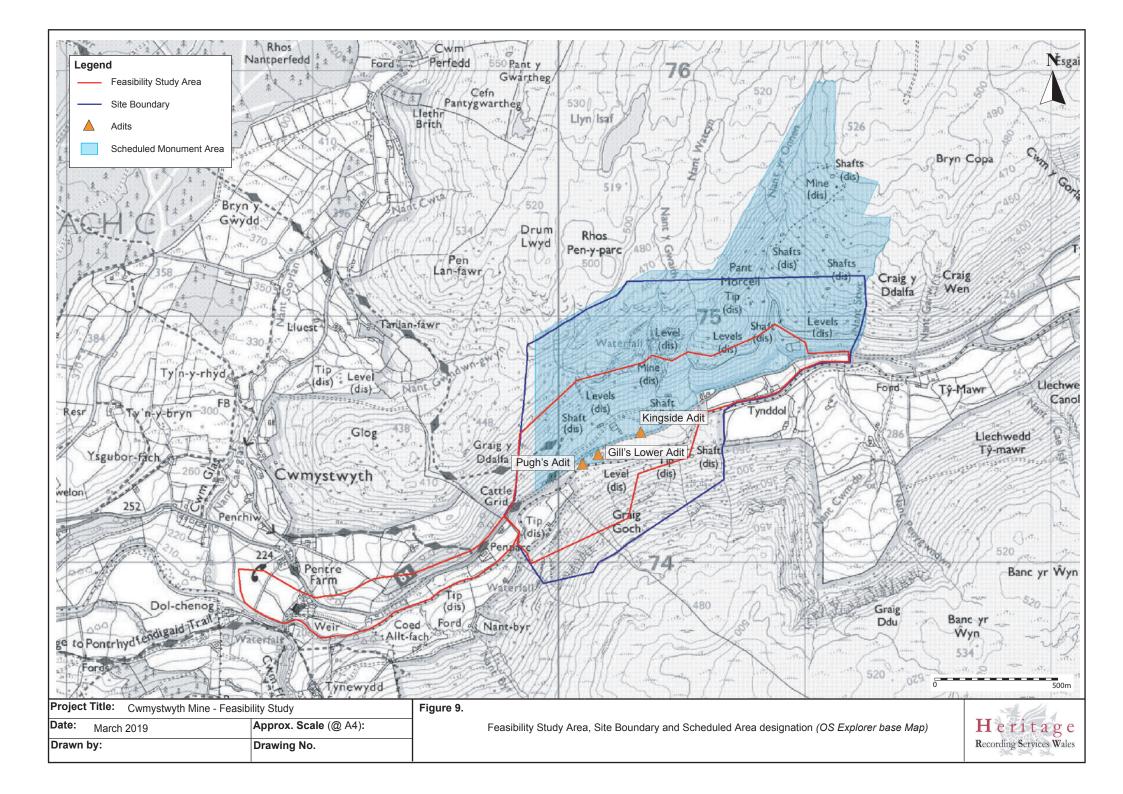
Enlarged view of OS Aerial photo (2016) showing main mine complex with Pugh's, Lower Gill's and Kingside Adits marked.

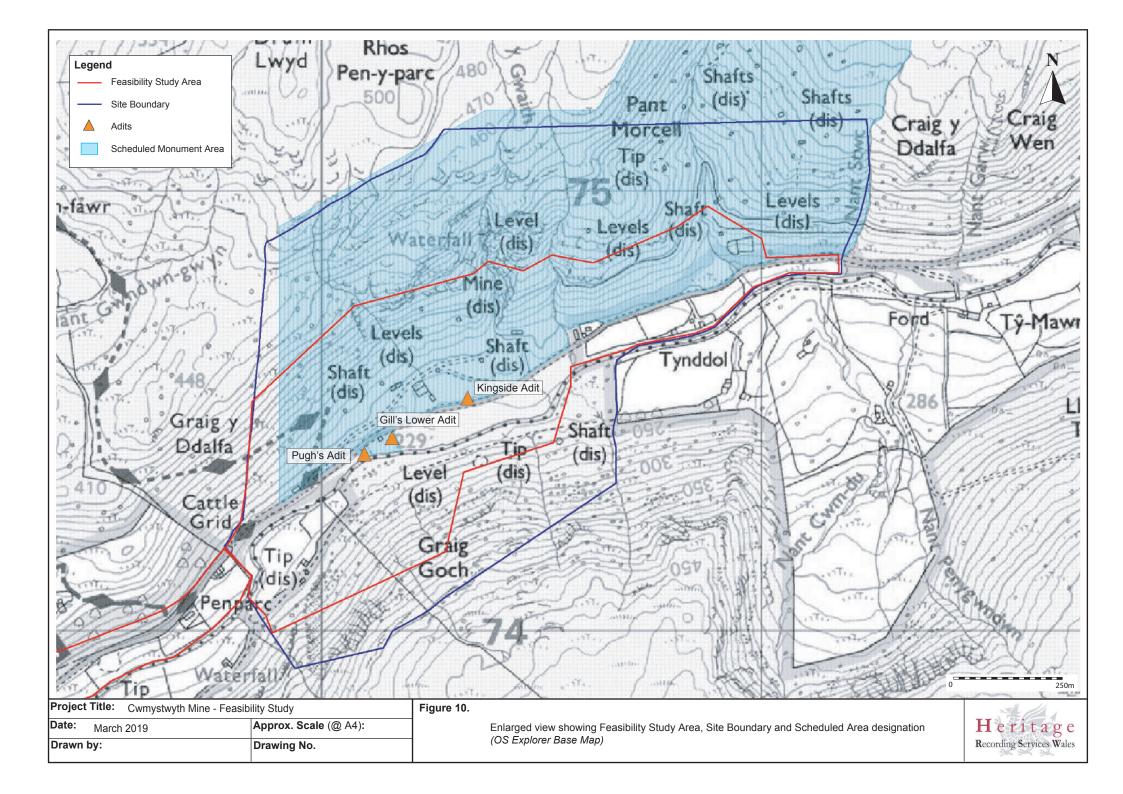


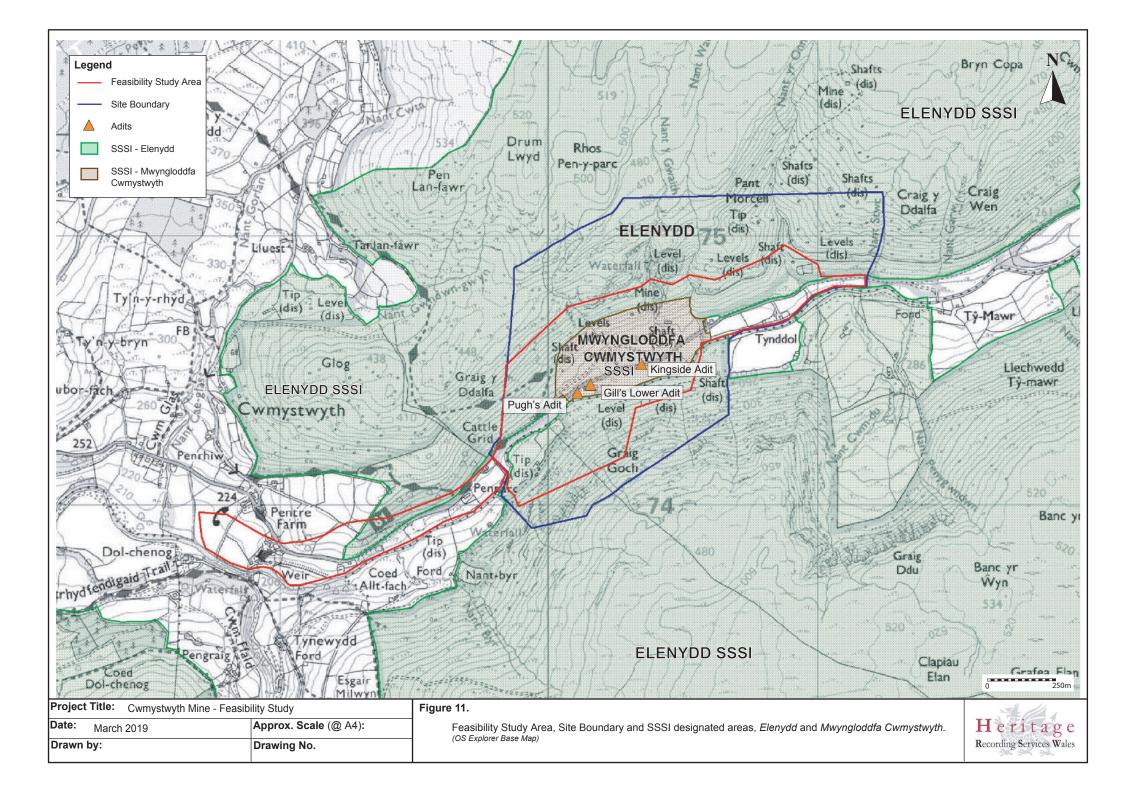


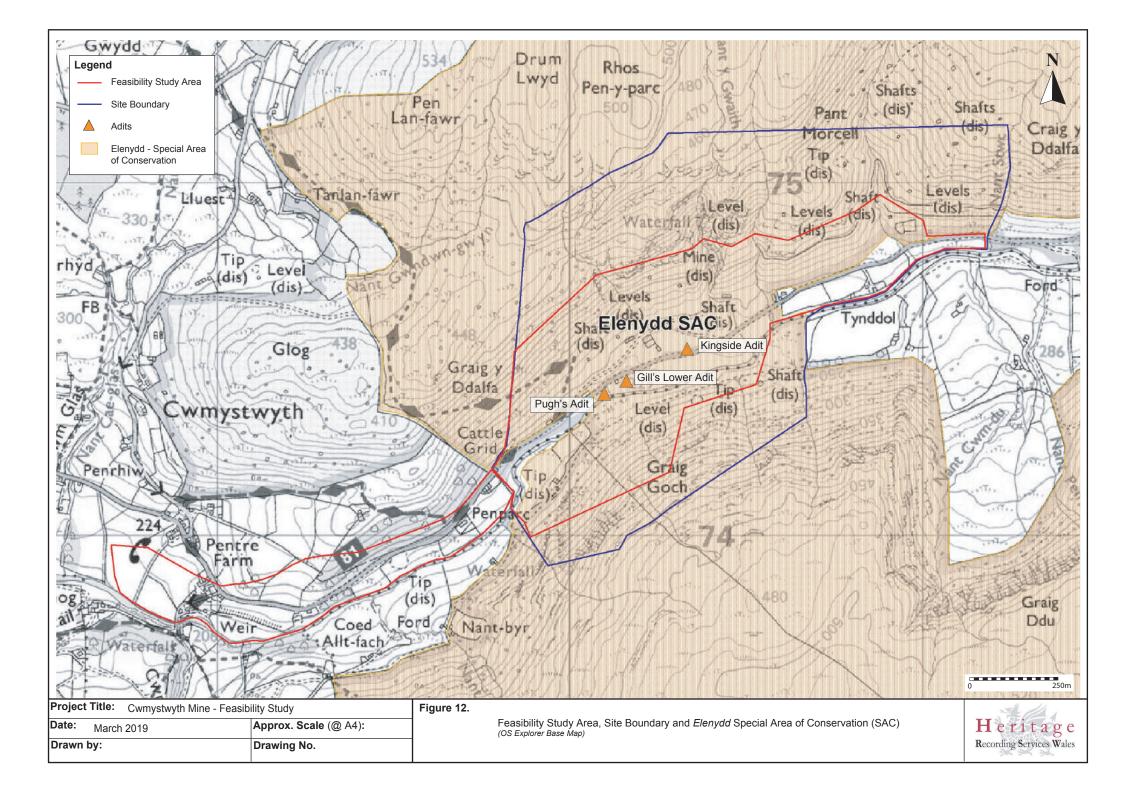


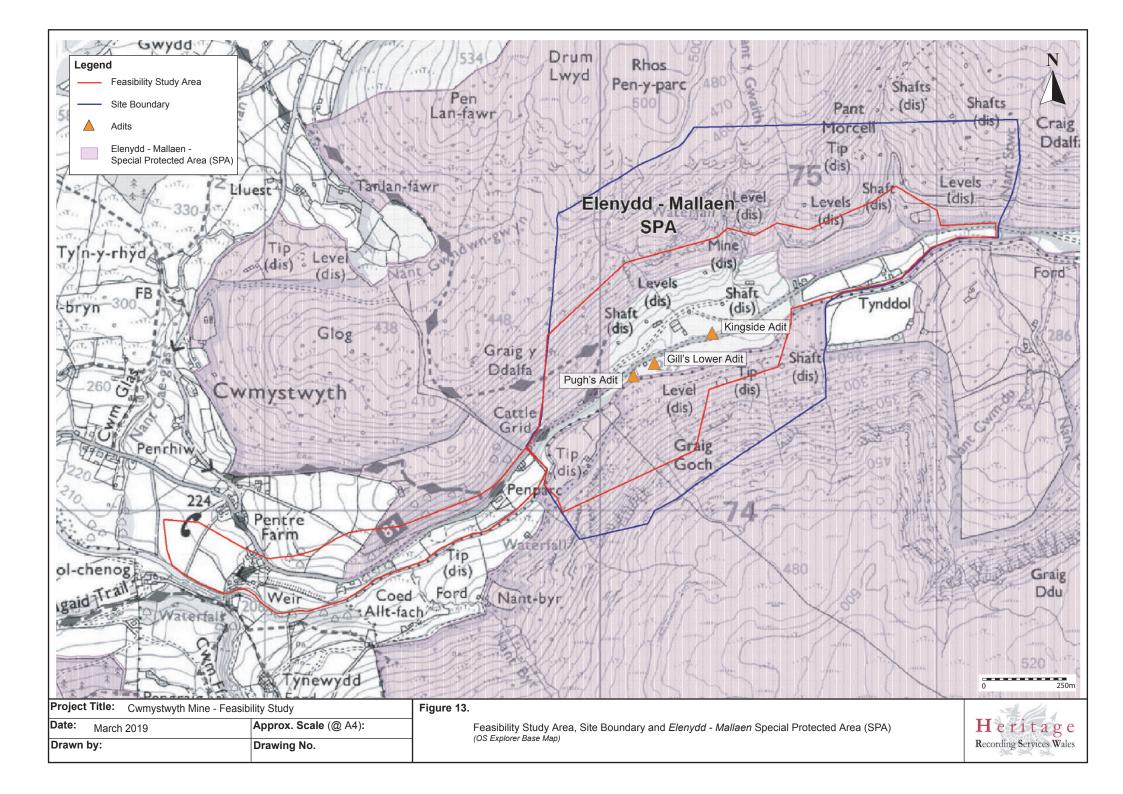


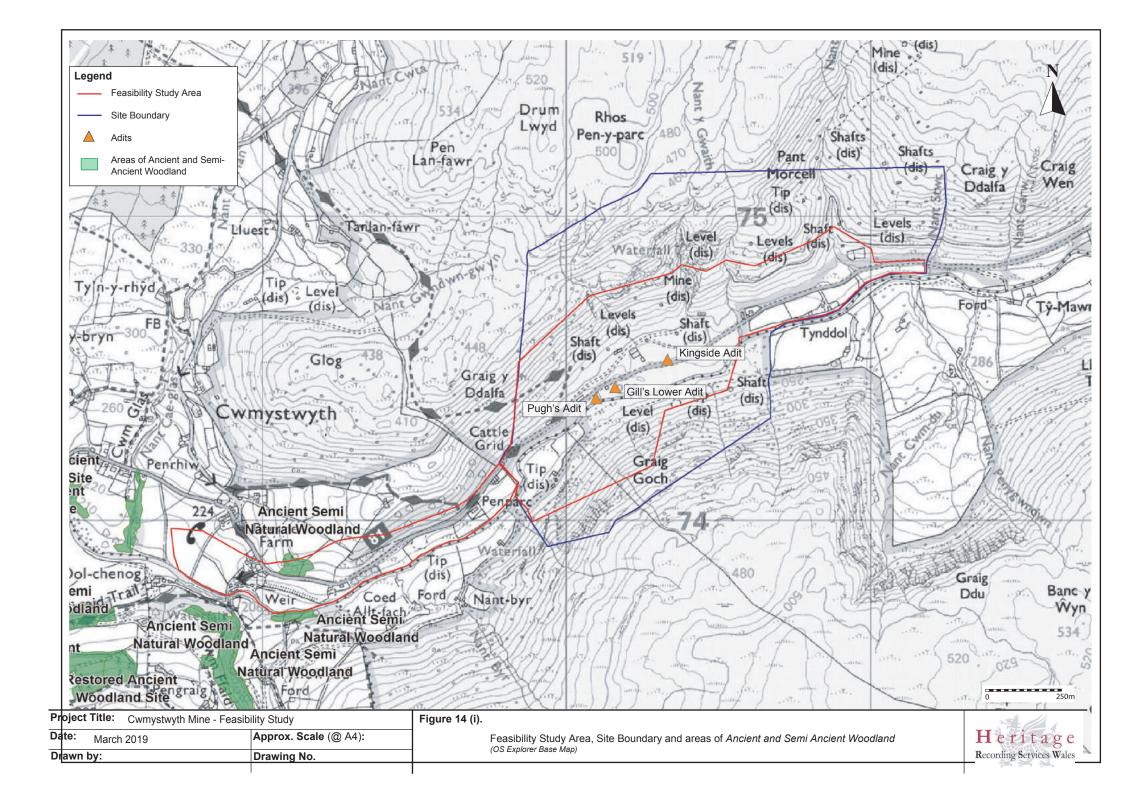


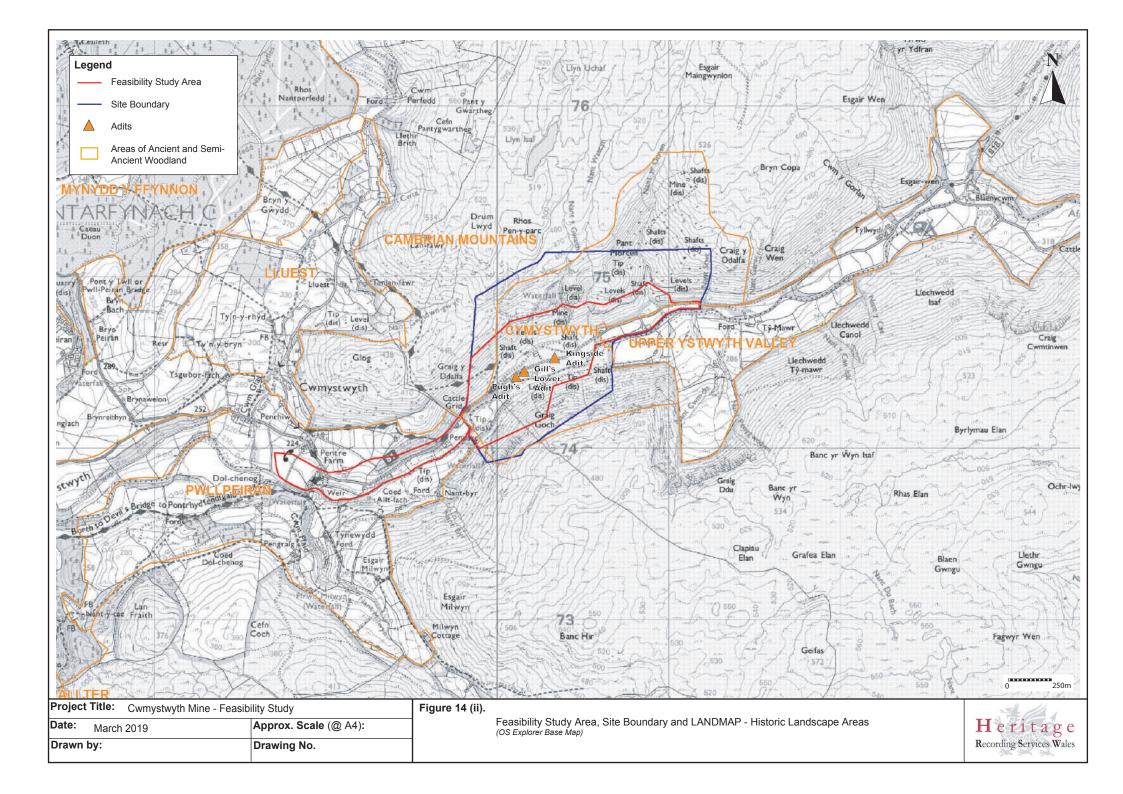


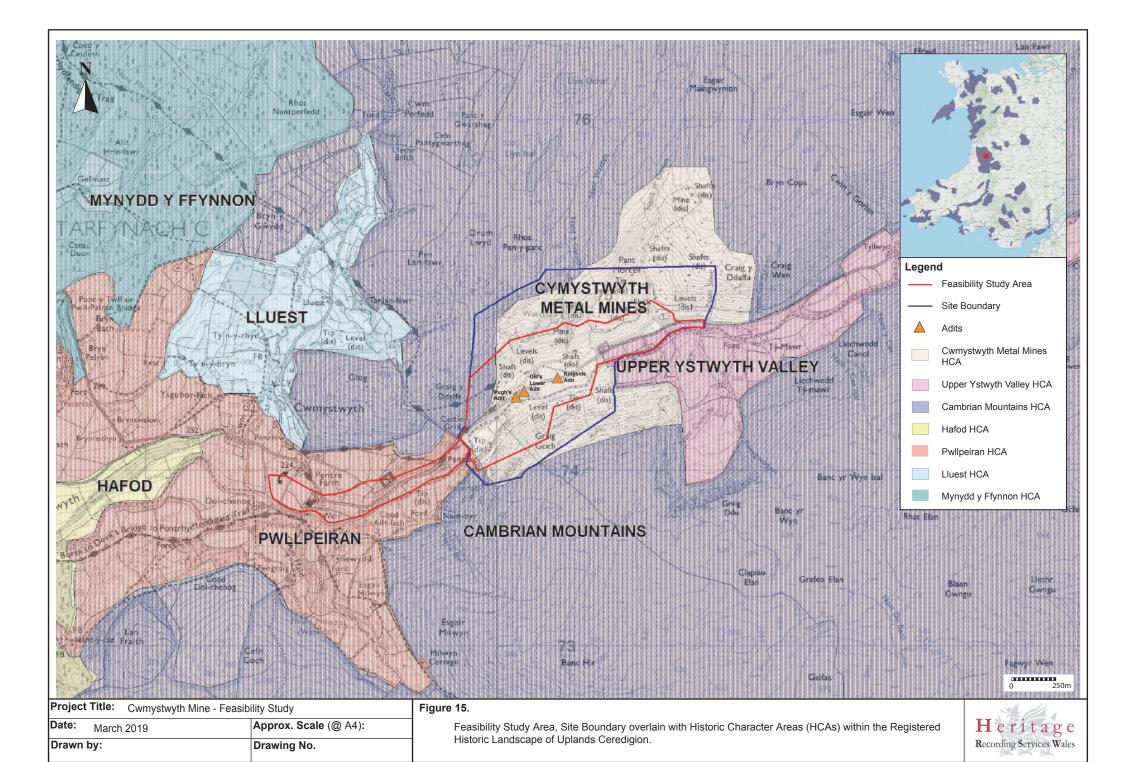


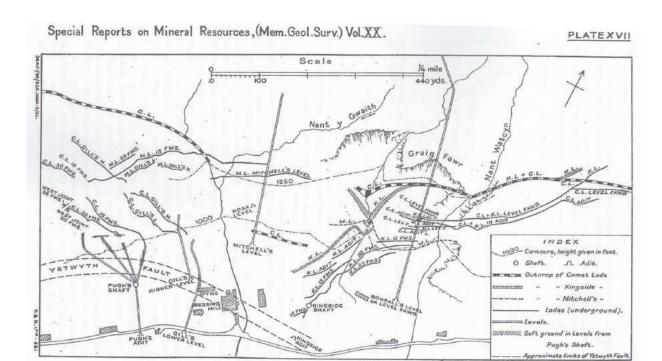










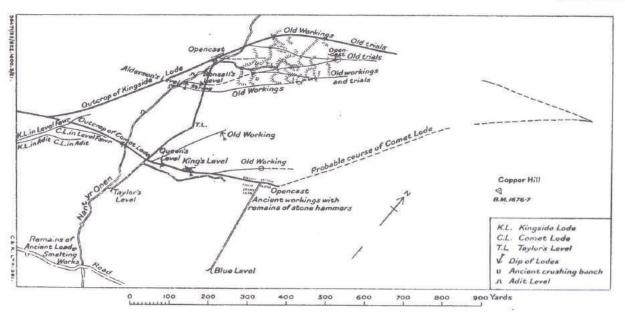


PLAN SHEWING RELATION OF MITCHELL'S LODE TO COMET

A) Plan showing relation of Mitchell's Lode to Comet Lode (from OT, Jones 1922)

Special Reports on Mineral Resources, (Mem. Geol. Surv.) Vol. XX.

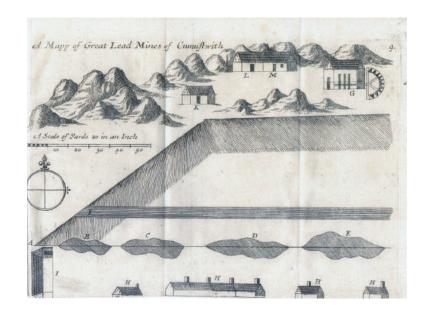


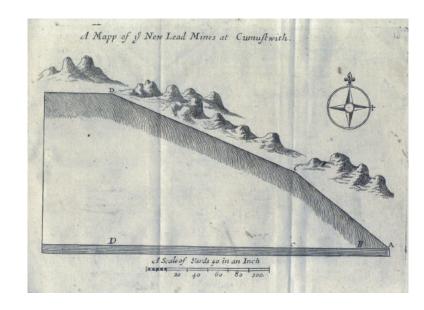


MAP OF LODES ON COPPER HILL, CWMYSTWYTH.

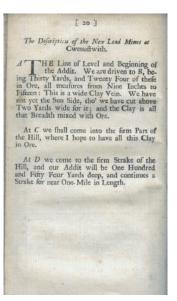
b) Map of Lodes on Copper Hill, Cwmystwyth (from OT, Jones 1922)

Project Title: Cwmystwyth Mine - Feasibility Study		Figure 16.	1
Date: March 2019	Approx. Scale (@ A4):	Plan and map of Cwmystwyth Mines Lodes (from OT Jones 1922)	Heritage
Drawn by:	Drawing No.		Recording Services Wales









Project	Title:	Cwmystwyth Mine - Feasib	ility Study
Date:	March	2019	Approx. Scale (@ A4):
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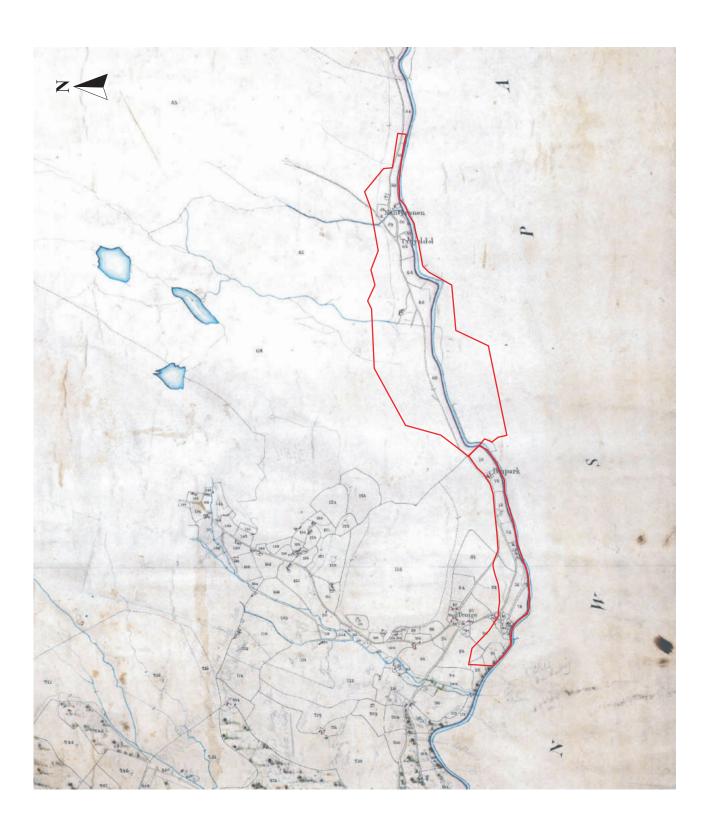


Project	Title:	Cwmystwyth Mine - Feasib	ility Study
Date:	March	2019	Approx. Scale (@ A4):
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Figure 18.

Approximate position of red line study area overlying OS Surveyors drawing (1820)



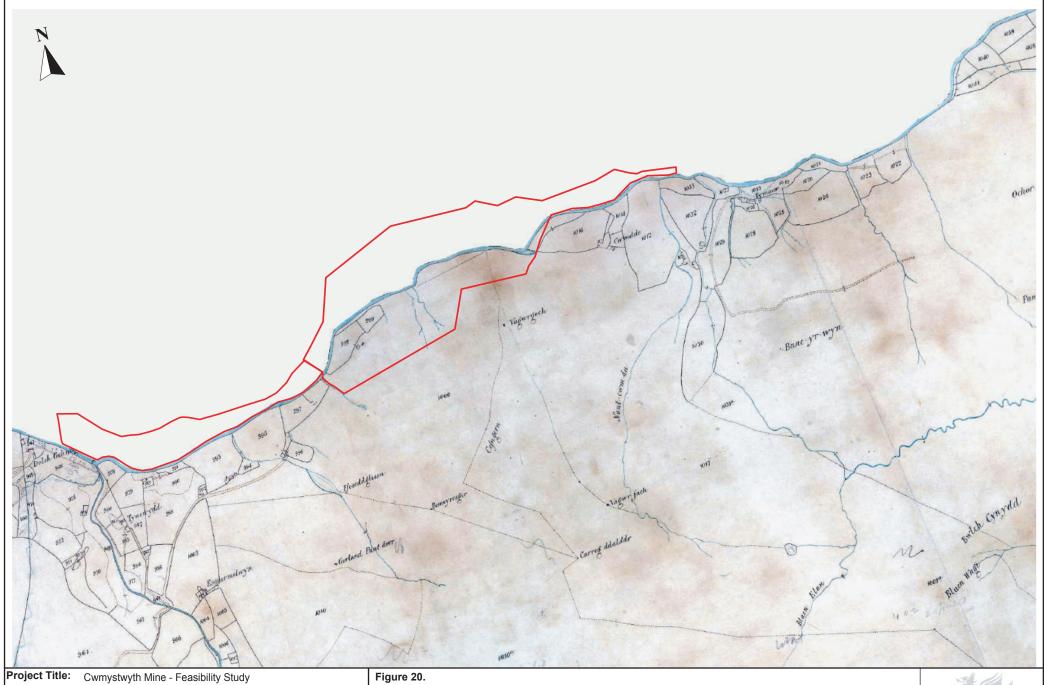


Project	Title:	Cwmys	twyth Mine - Feasibility Study
Date:	March	2019	Approx. Scale (@ A4):
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Feasibility Study Area overlying Llanfihangel y Creiddyn Parish Tithe Map of 1847.



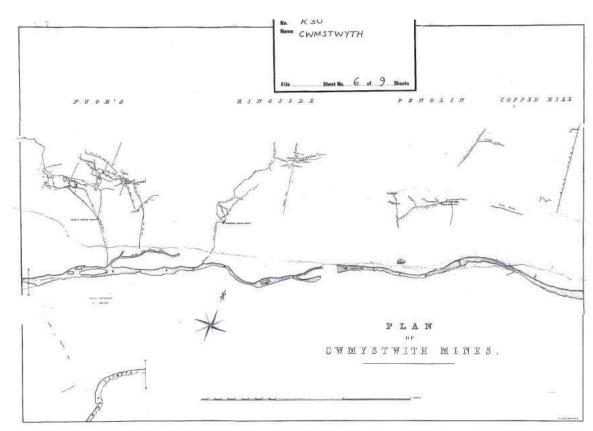


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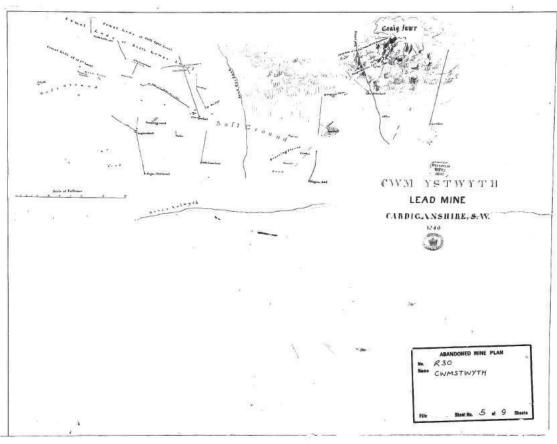
Drawn by: Drawing No.

Feasibility Study Area (approx) overlying Gwnnws Parish Tithe Map of 1847



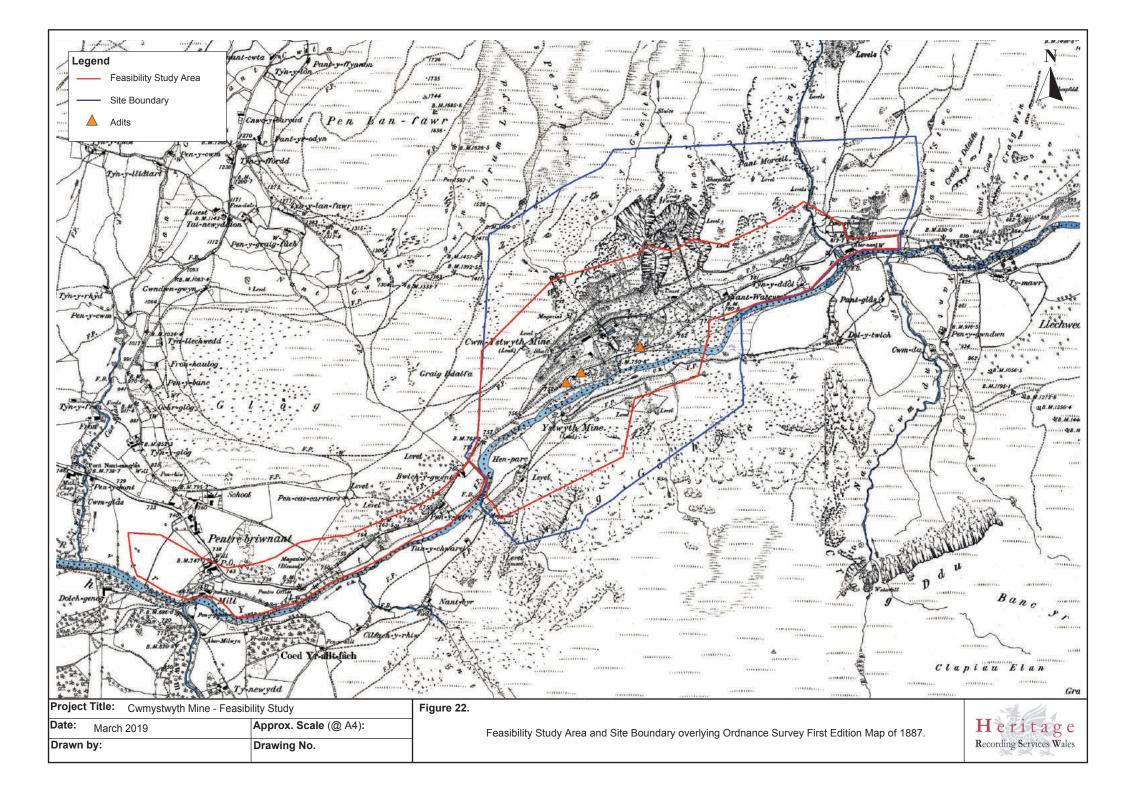


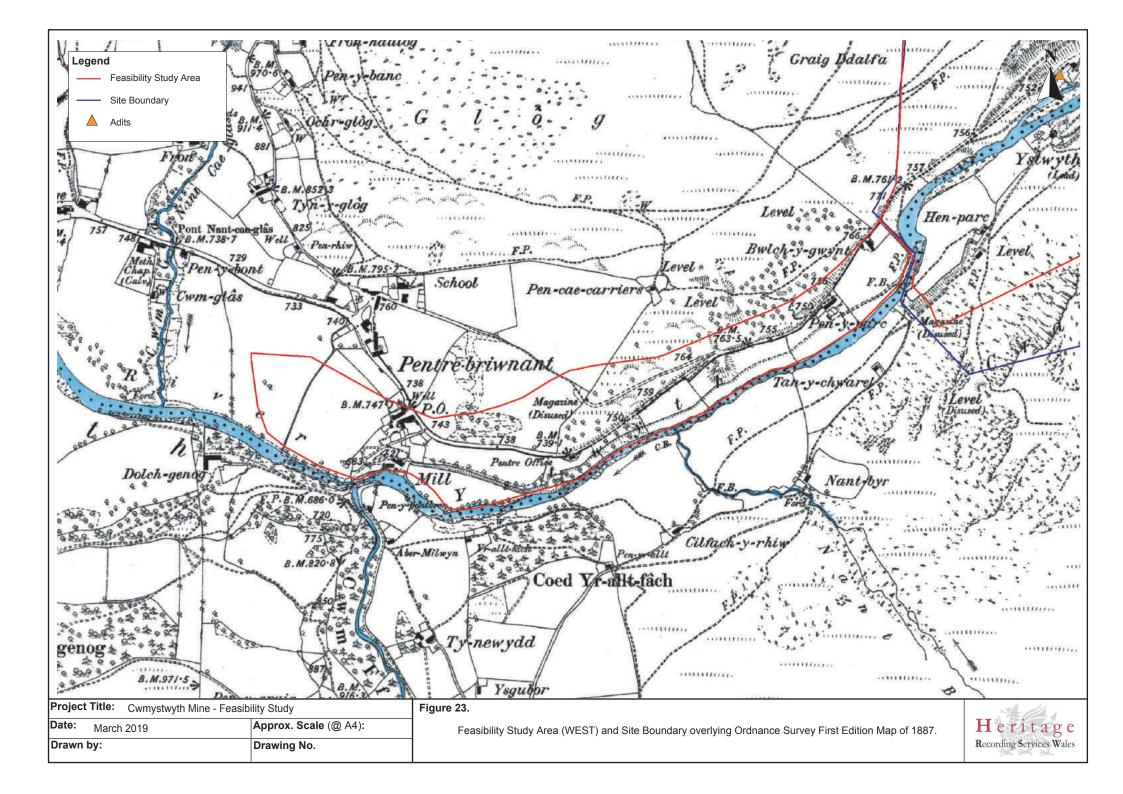
A) Plan of Cwmystwyth Mine from W.Smyth 1846 (RCAHMW Archive)

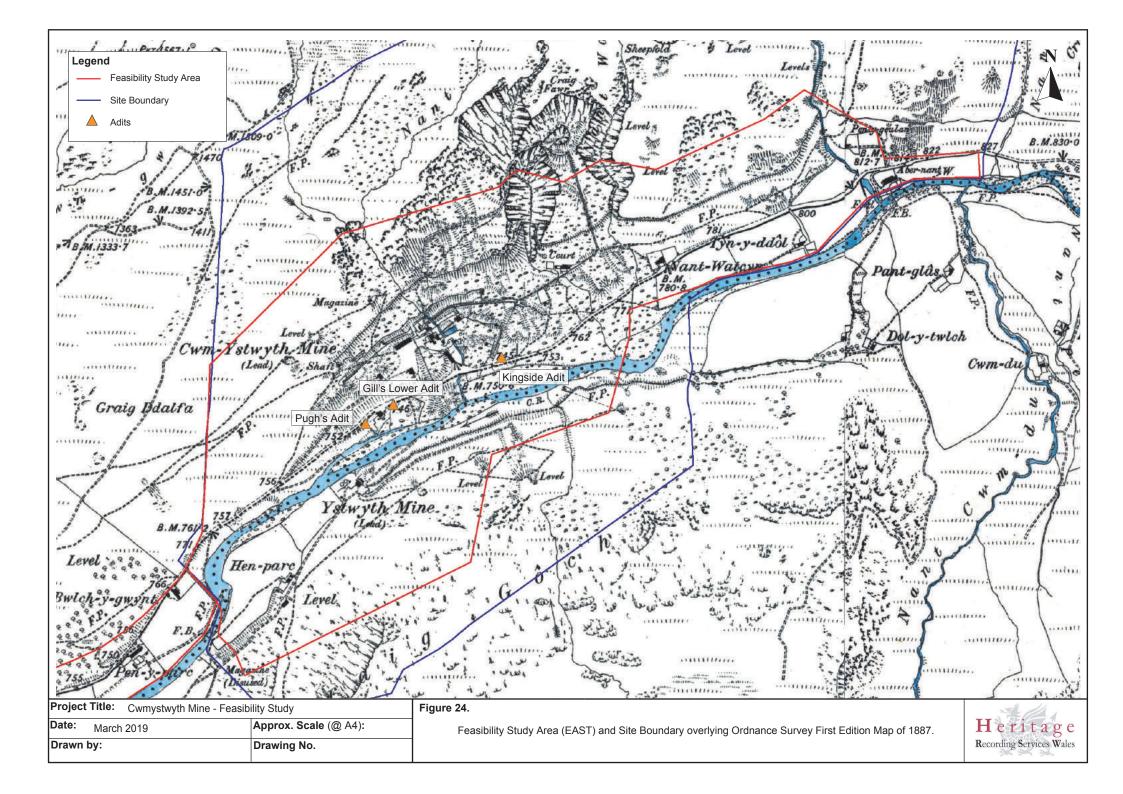


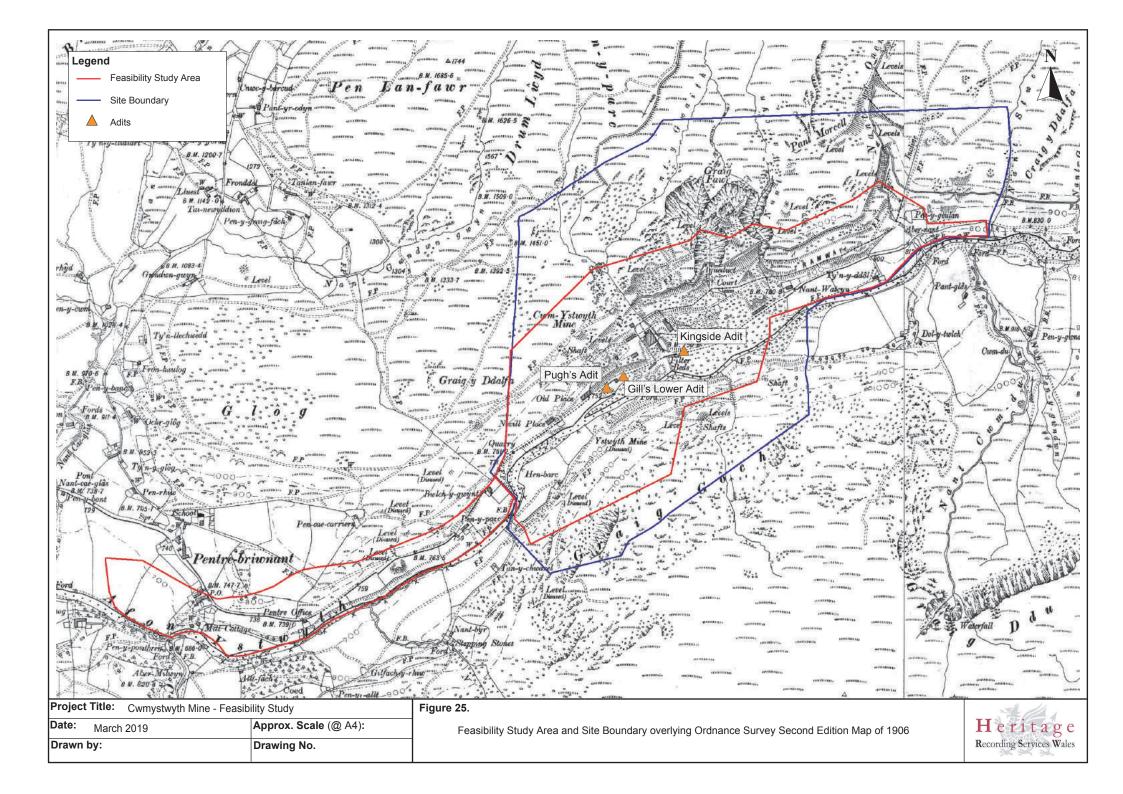
B) Plan of Cwmystwyth Mine Lodes, from W.Smyth 1846 (RCAHMW Archive)

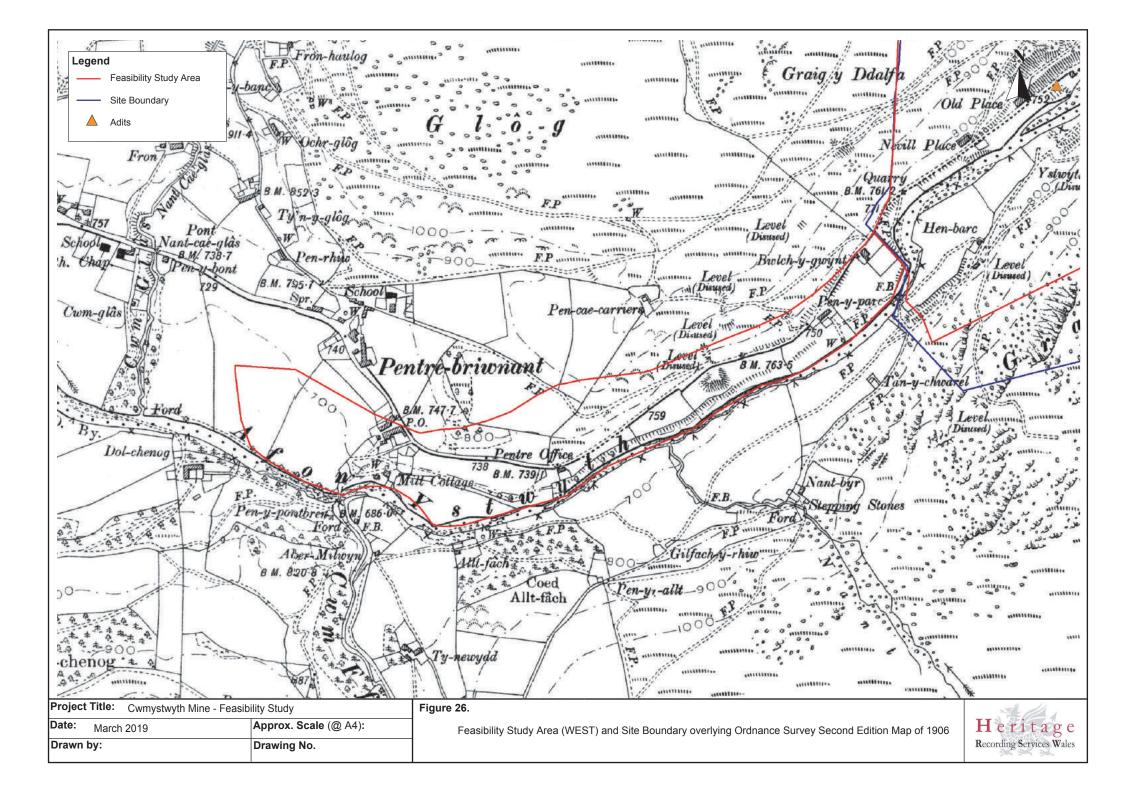
Project Title: Cwmystwyth Mine - Feasibility Study			Figure 21.	3
Date:	March 2019	Approx. Scale (@ A4):	Plans of Cwmystwyth Mine made by W.Smyth dated 1847.	Heritage
Drawn by:		Drawing No.		Recording Services Wales

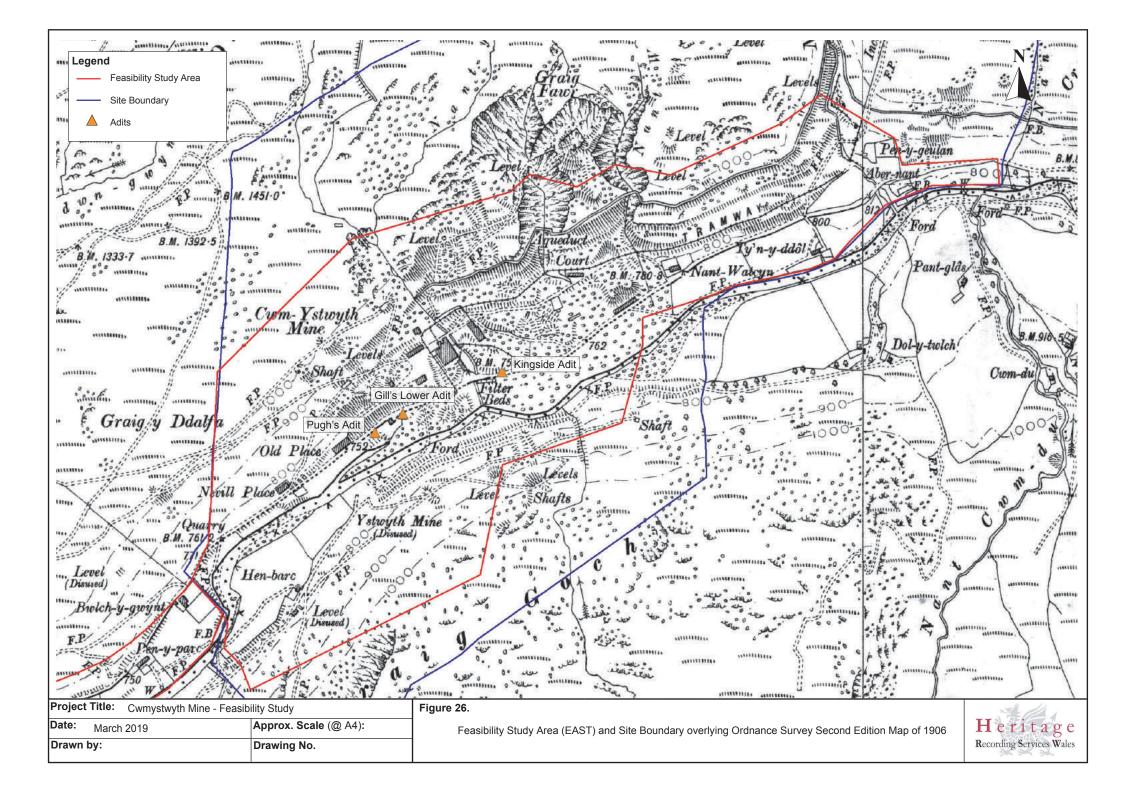


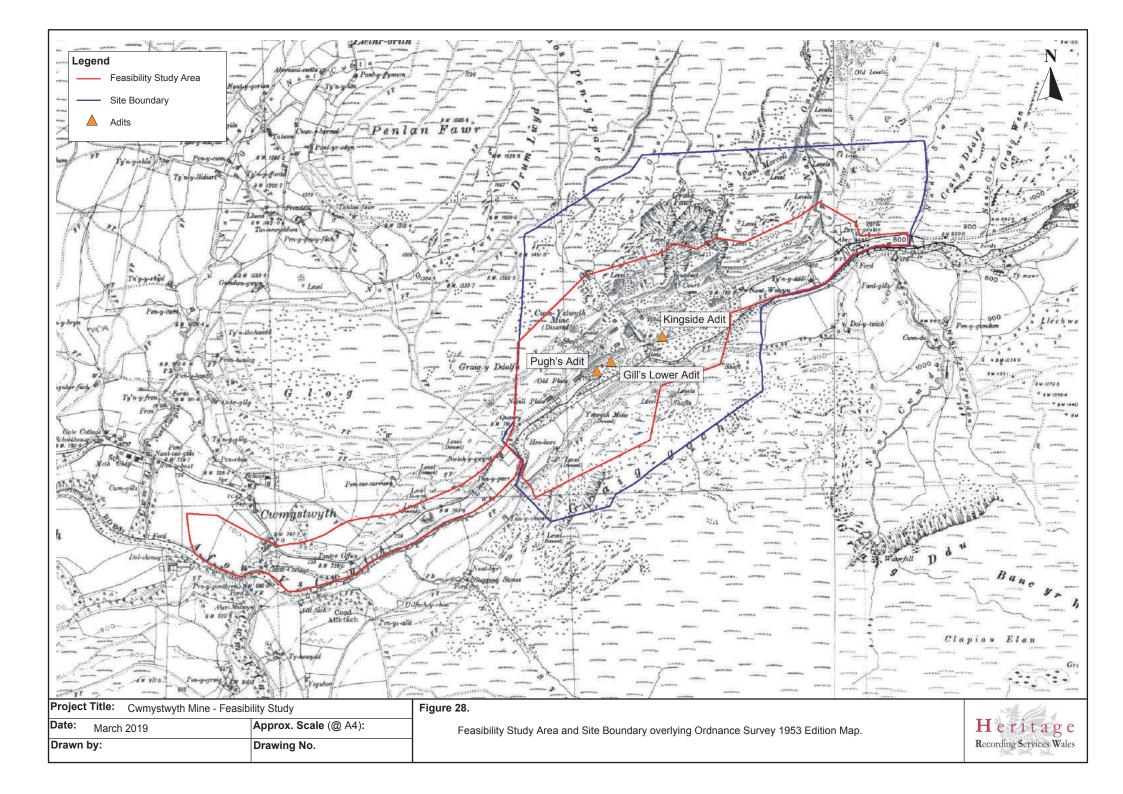


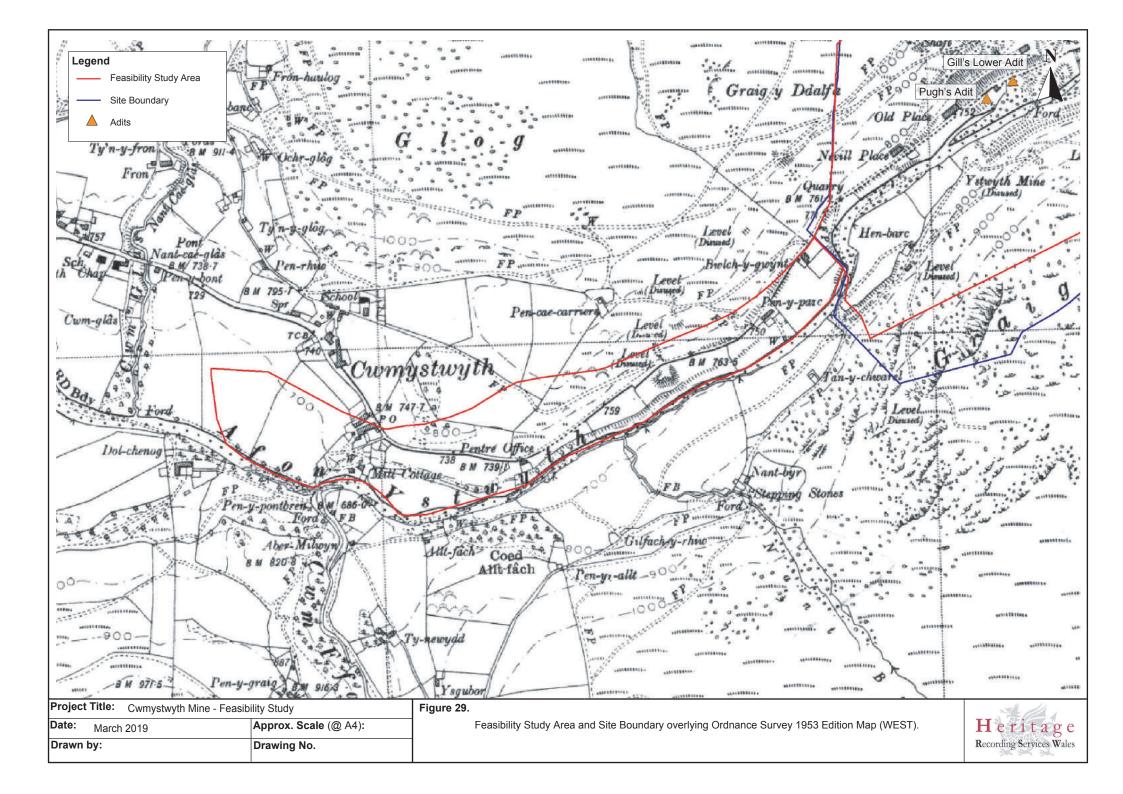


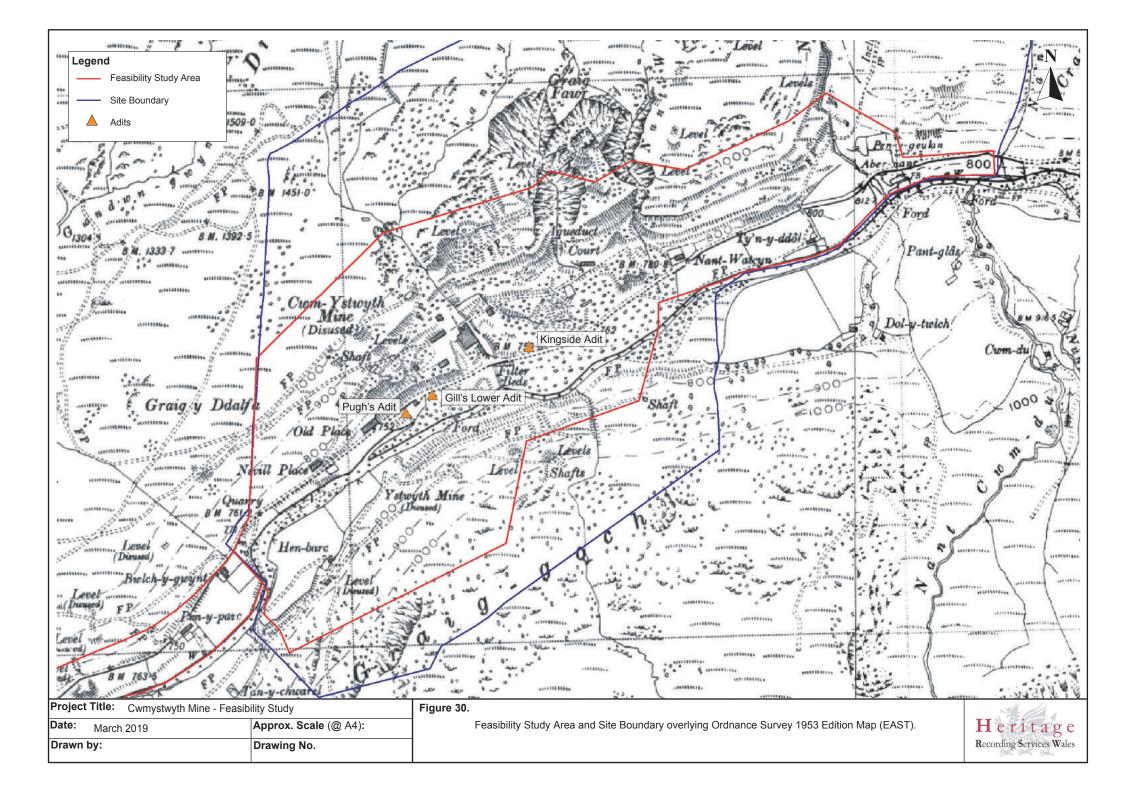


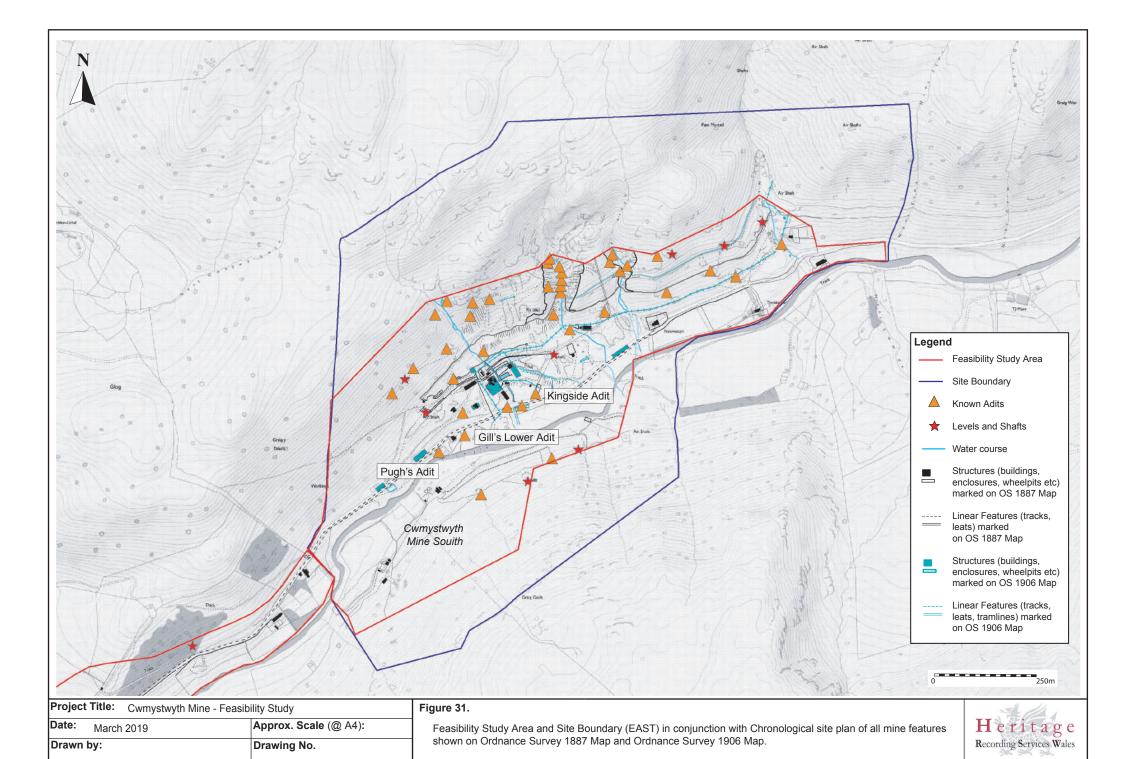


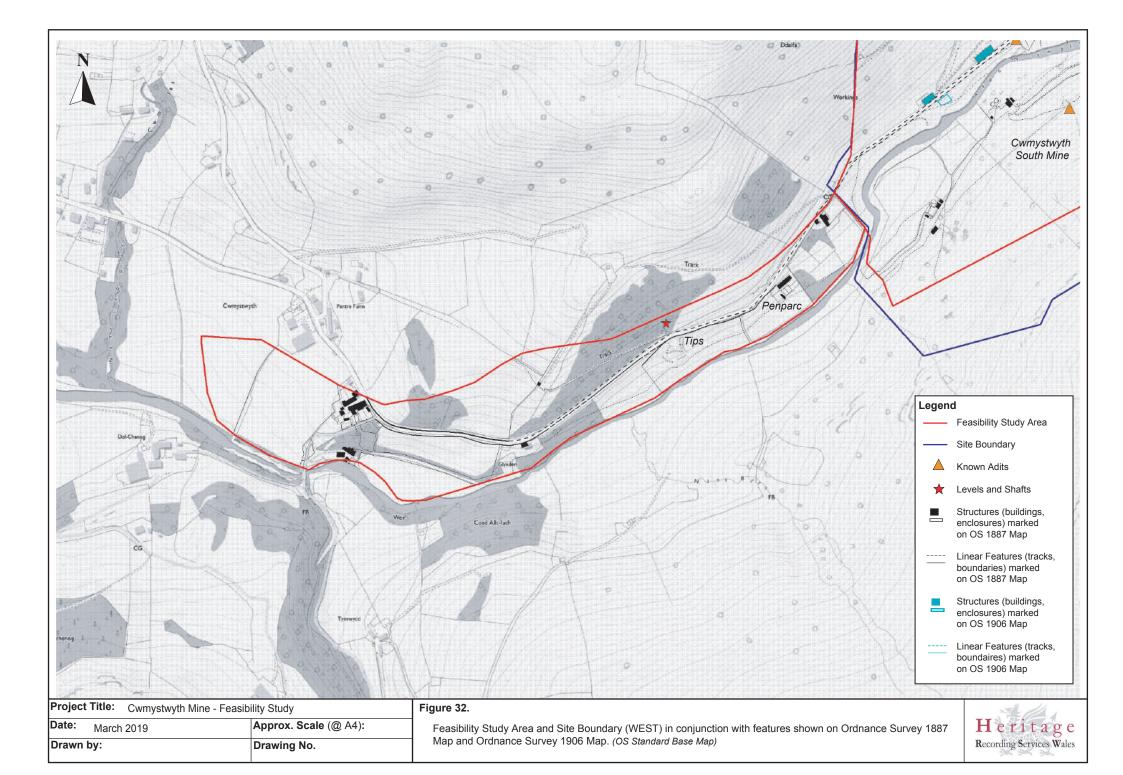




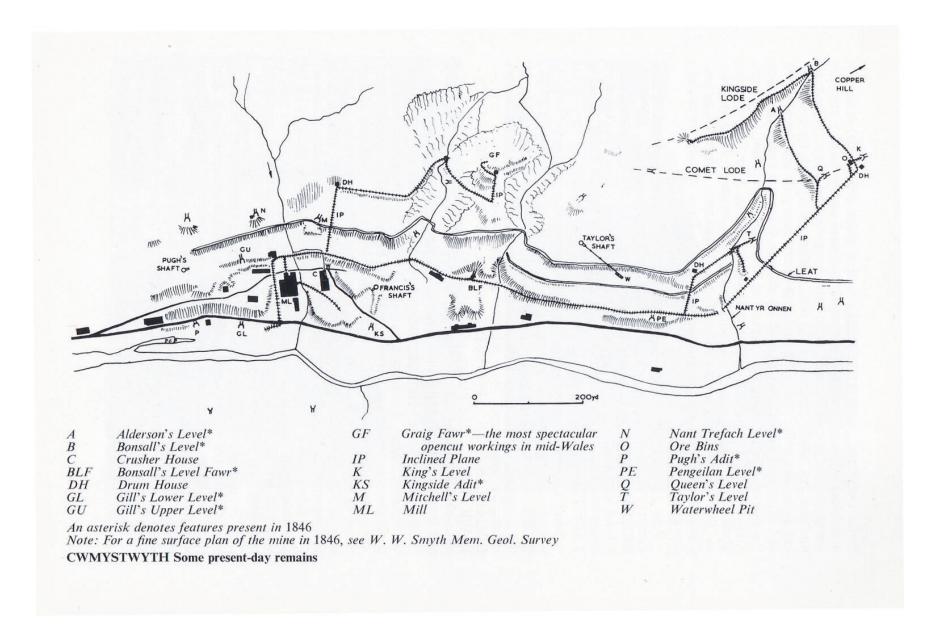








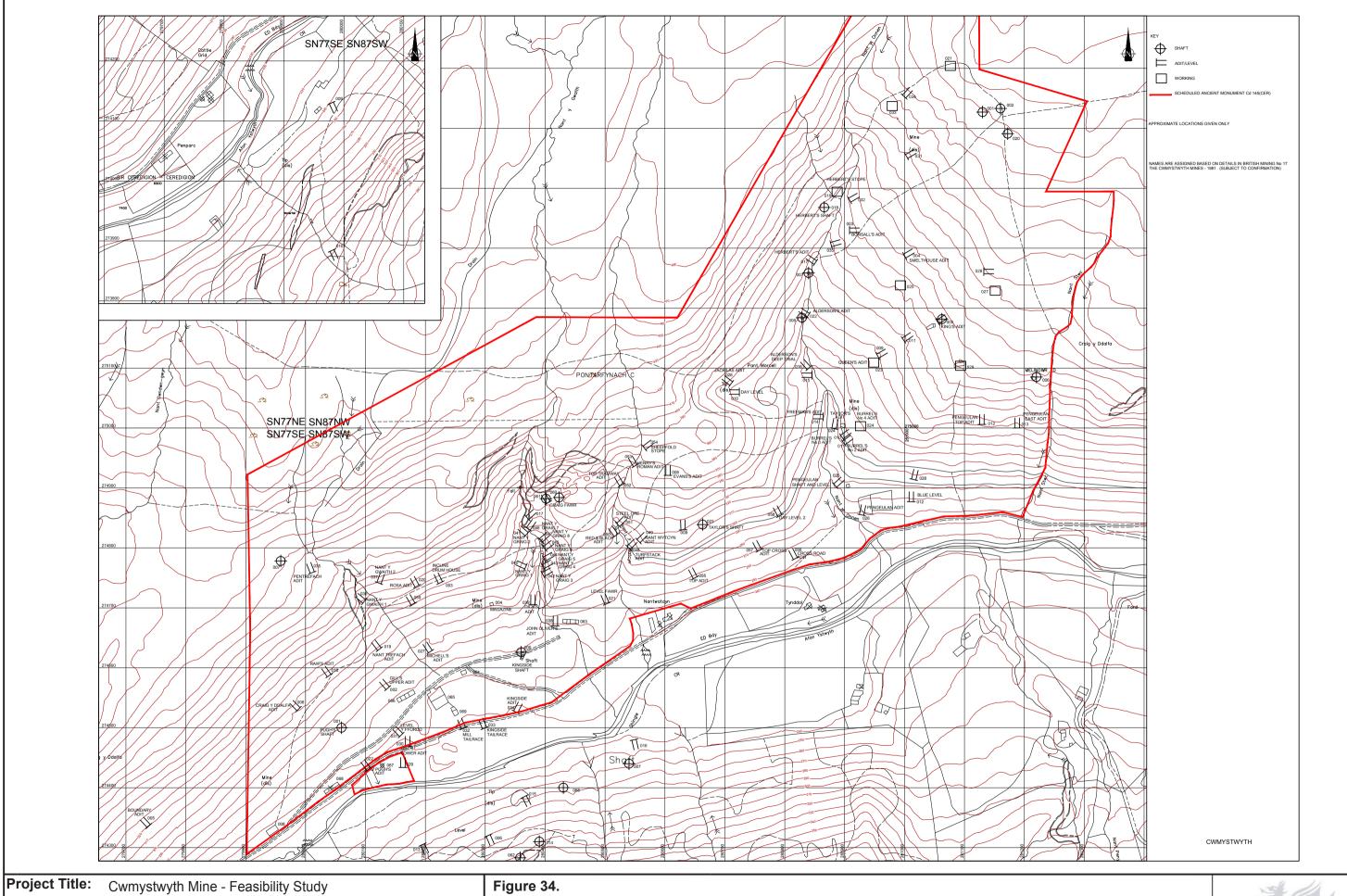




Project Title: Cwmystwyth Mine - Feasibility Study		Figure 33.
Date: March 2019	Approx. Scale (@ A4):	
Drawn by:	Drawing No.	

Plan of Cwmystwyth Mines dated 1975 from David Bick's Metal Mines of Mid Wales series.

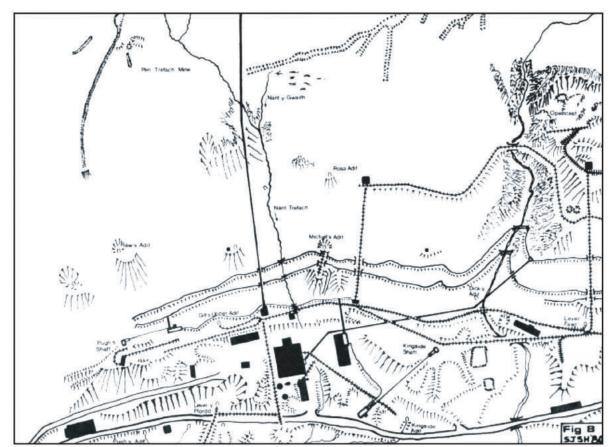




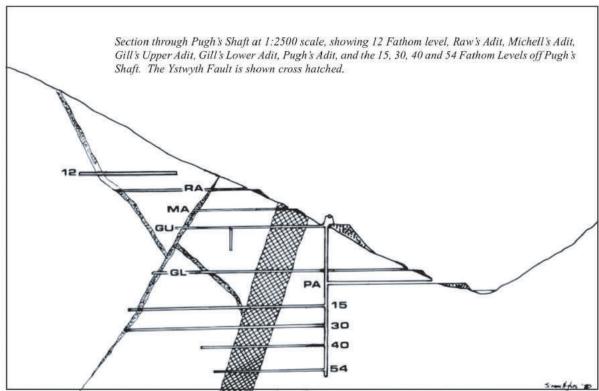
Date: March 2019 Approx. Scale (@ A4): Cambrian Mines Trust Plan of Cwmystwyth to scheduled area...

Cambrian Mines Trust Plan of Cwmystwyth Mines. Shows position of known shafts, level and Adits in relation to scheduled area..





A) Plan by Simon Hugnes (1981) of Pugn's and Kingside Mine.



b) Section through Pugh's shaft. From Simon Hughes 1981.

Project	Title:	Cwmys	twyth Mine - Feasibility Study
Date:	March	2019	Approx. Scale (@ A4):
Drawn by:			Drawing No.

Figure 35.

Plans of Cwmystwyth Mines from Simon Hughes 1981.





Project	Title:	Cwmystwyth Mine - Feasib	ility Study
Date:	March	2019	Approx. Scale (@ A4):
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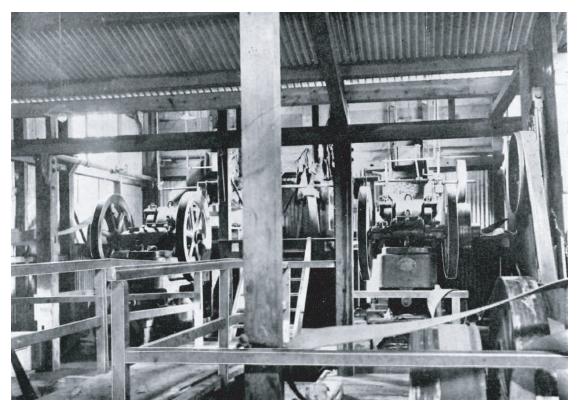
Figure 36.

Panoramic view of Cwmystwyth Mines. Looking northwest from Llechwedd Ty Mawr (RCAHMW Archive)





A) Cwmystwyth Dressing Mill Floor, c.1900 (RCAHMW Archive)



b) Interior of Cwmystwyth Dressing Mill Floor, c.1900 (RCAHMW Archive)

Project	Title:	Cwmys	twyth Mine - Feasibility Study
Date:	March	2019	Approx. Scale (@ A4):
Drawn	by:		Drawing No.





A) View of Cwmystwyth Mine c. 1900. Looking northeast (Simon Hughes 1981)



B) View of Cwmystwyth Mine c. 1900. Central mine area (Simon Hughes 1981)



C) View of Cwmystwyth Mine c. 1912. Crushing Mill (Simon Hughes 1981)



D) View of Cwmystwyth Mine c. 1900. Mine yard (Simon Hughes 1981)



E) Cwmystwyth Miners in1910 (Simon Hughes 1981)

Project	Title:	Cwmys	twyth Mine - Feasibility Study
Date:	March	2019	Approx. Scale (@ A4):
Drawn by:			Drawing No.

Figure 38.

Old Photos of Cwmystwyth Mine 1900 - 1912. From Simon Hughes 1981





A) View of Cwmystwyth Mine. Dressing Mil in 1970s.



B) View of Cwmystwyth Mine. Dressing Mil in 1970s.



C) View of Cwmystwyth Mine. Dressing Mil in 1970s.



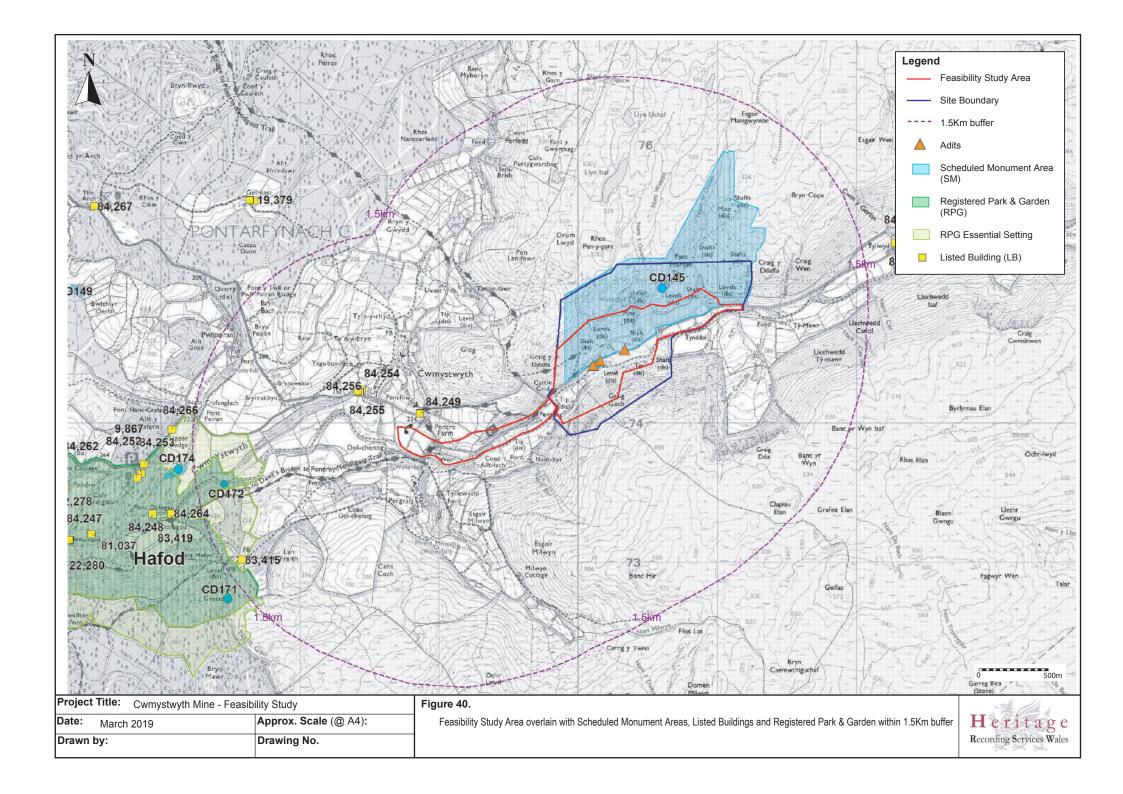
D) View of Cwmystwyth Mine. Old Place in 1970s.

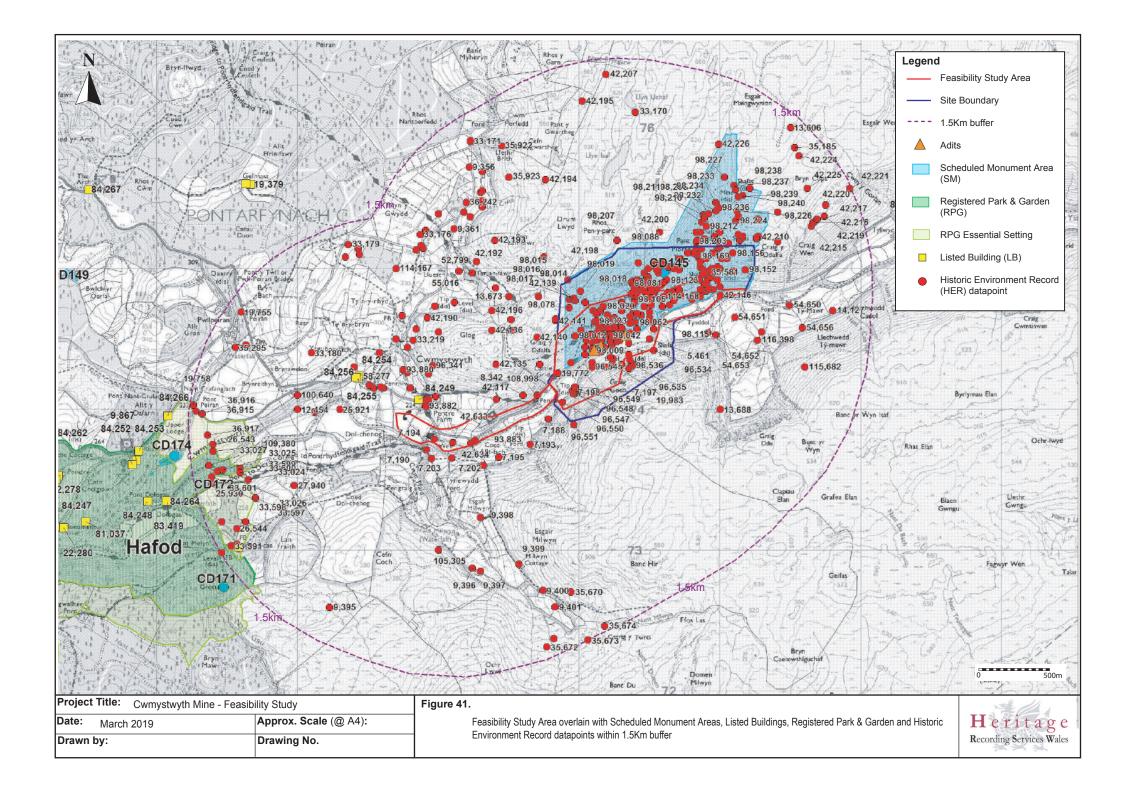


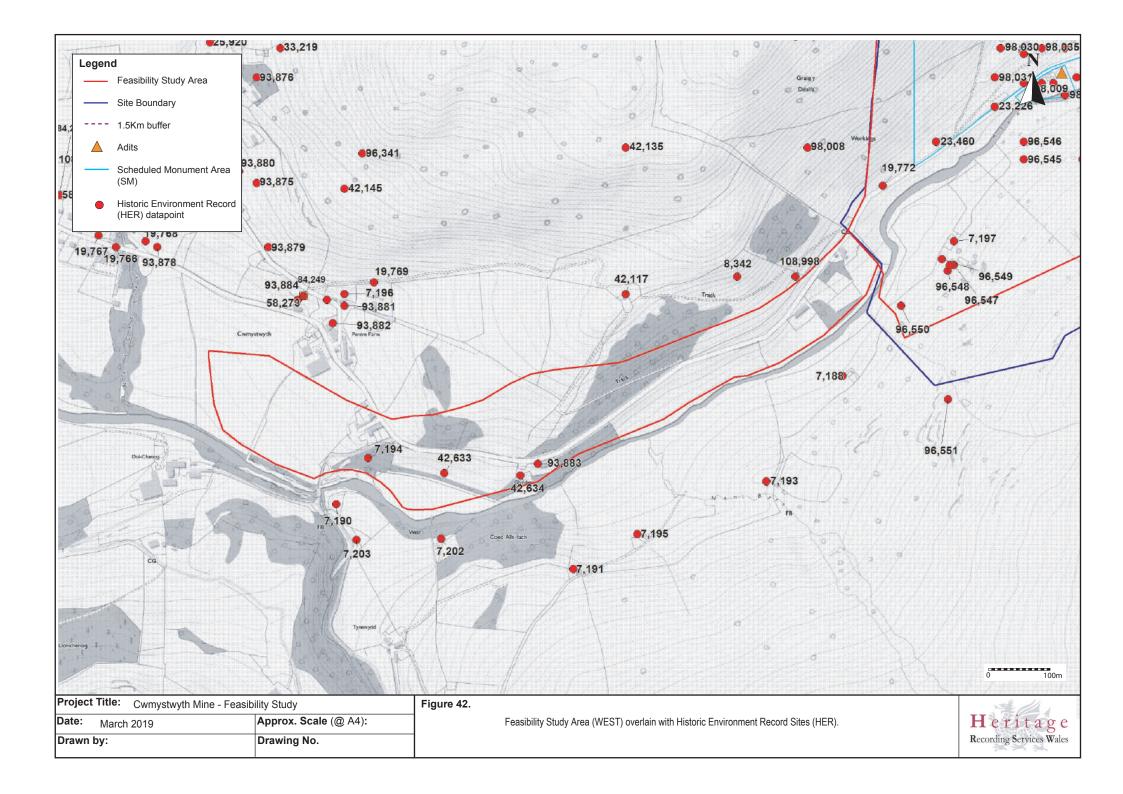
e) View of Cwmystwyth Mine. Looking west in 1970s.

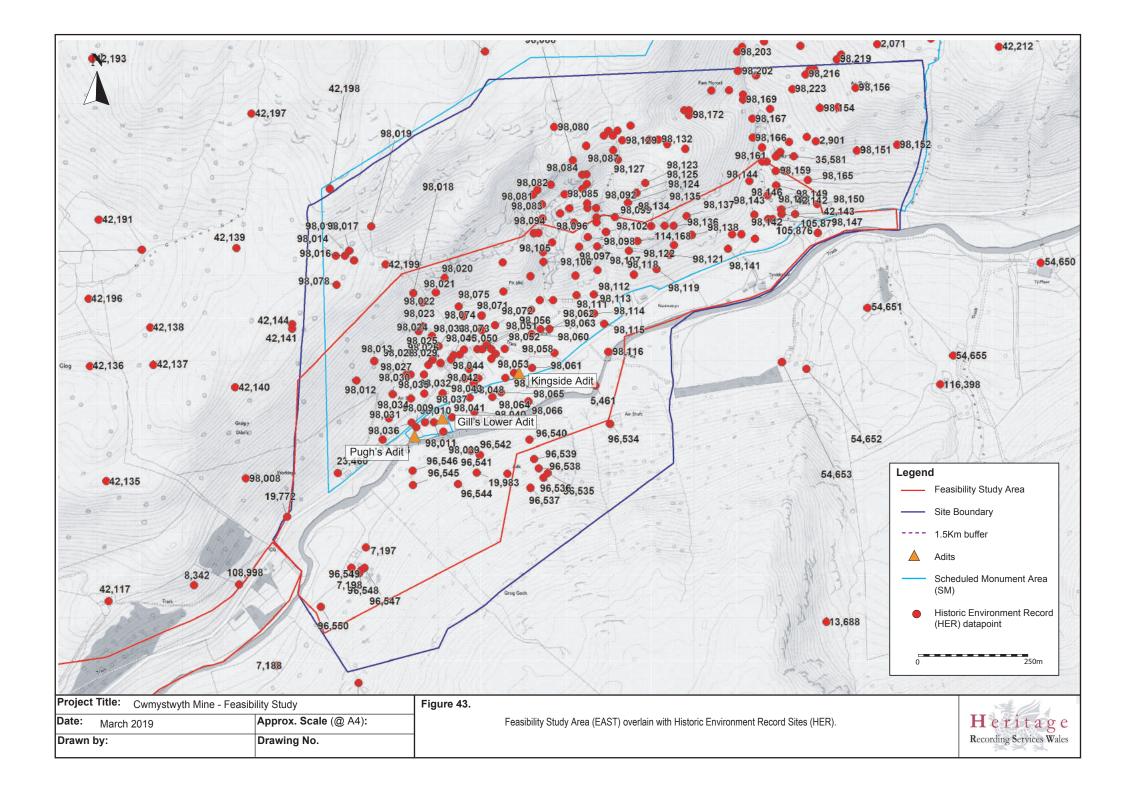
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Date:	March		Approx. Scale (@ A4):
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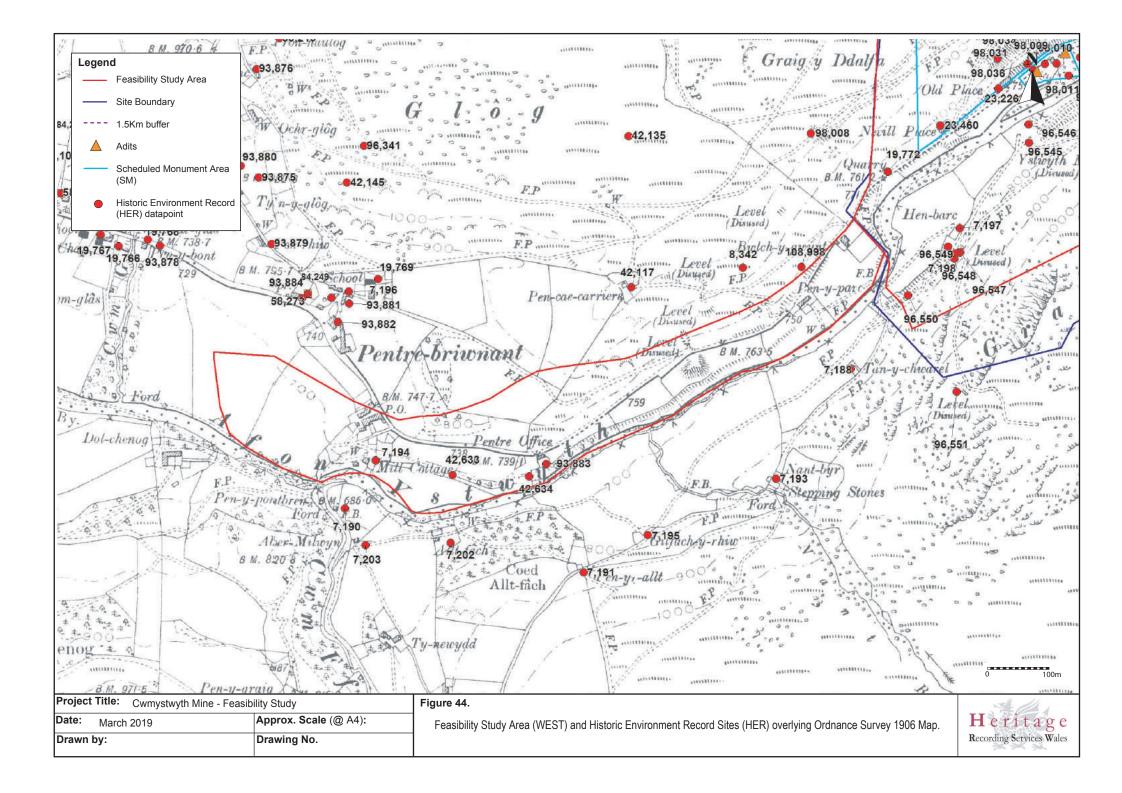


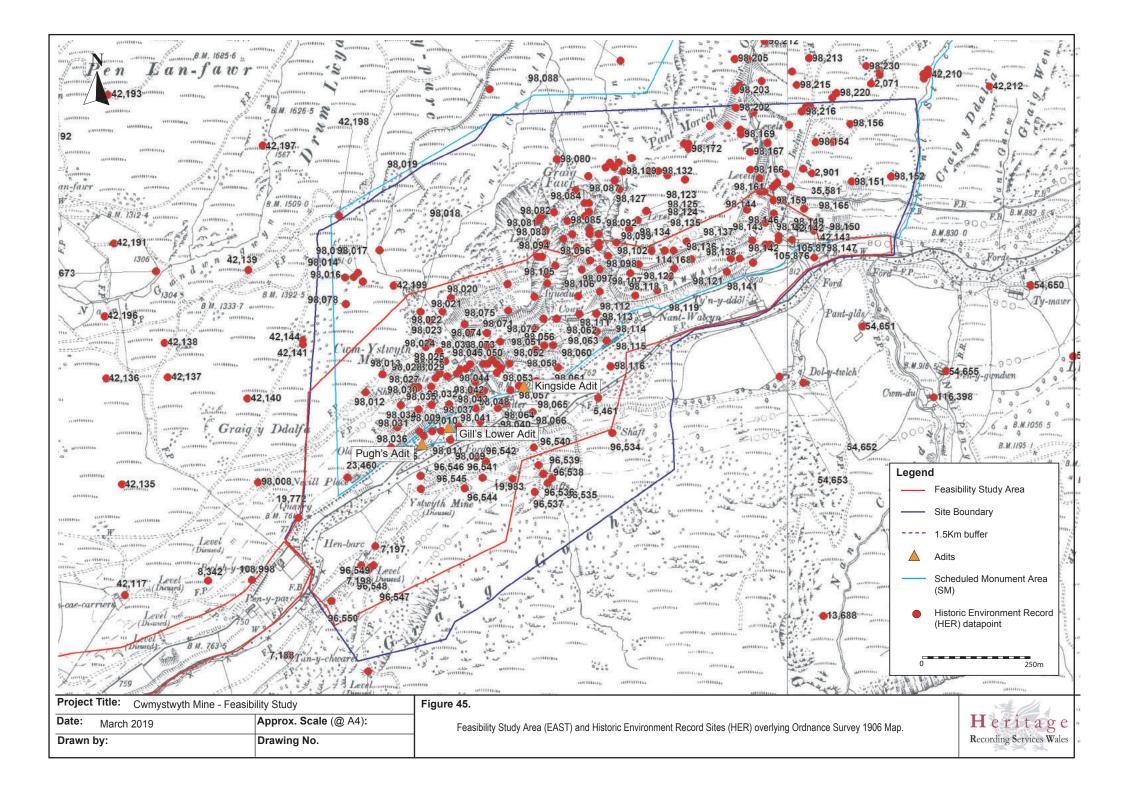


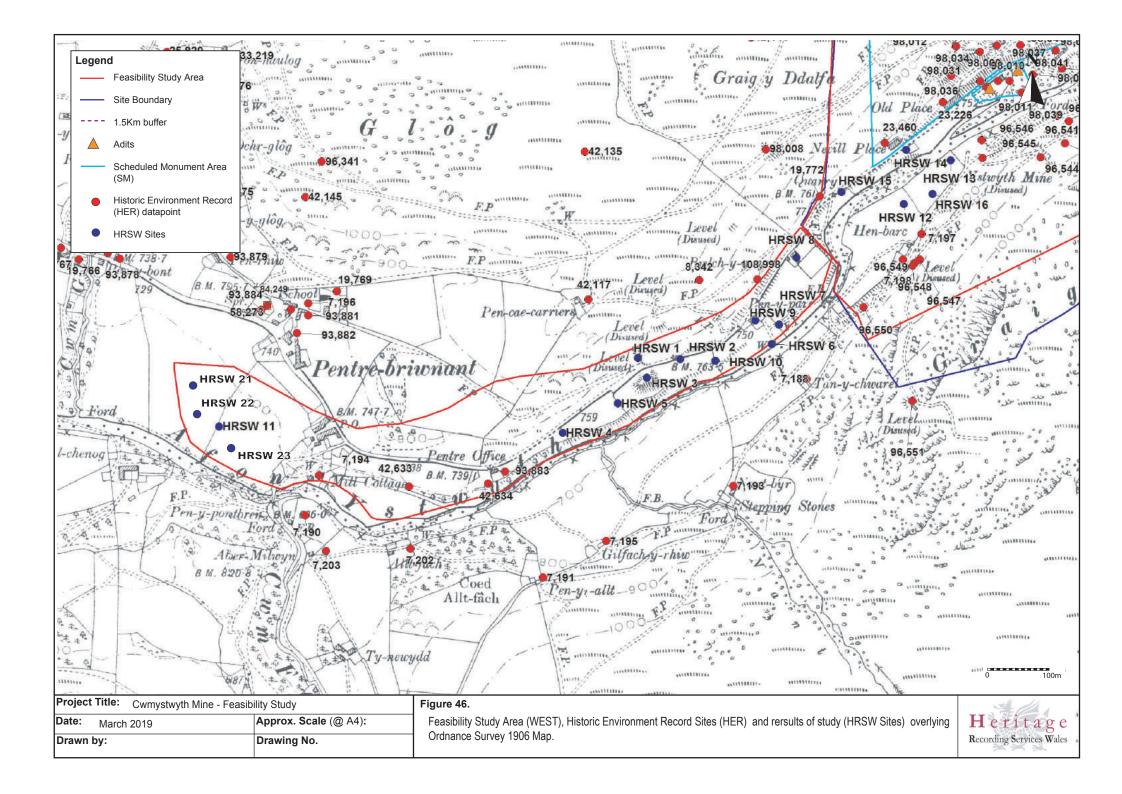


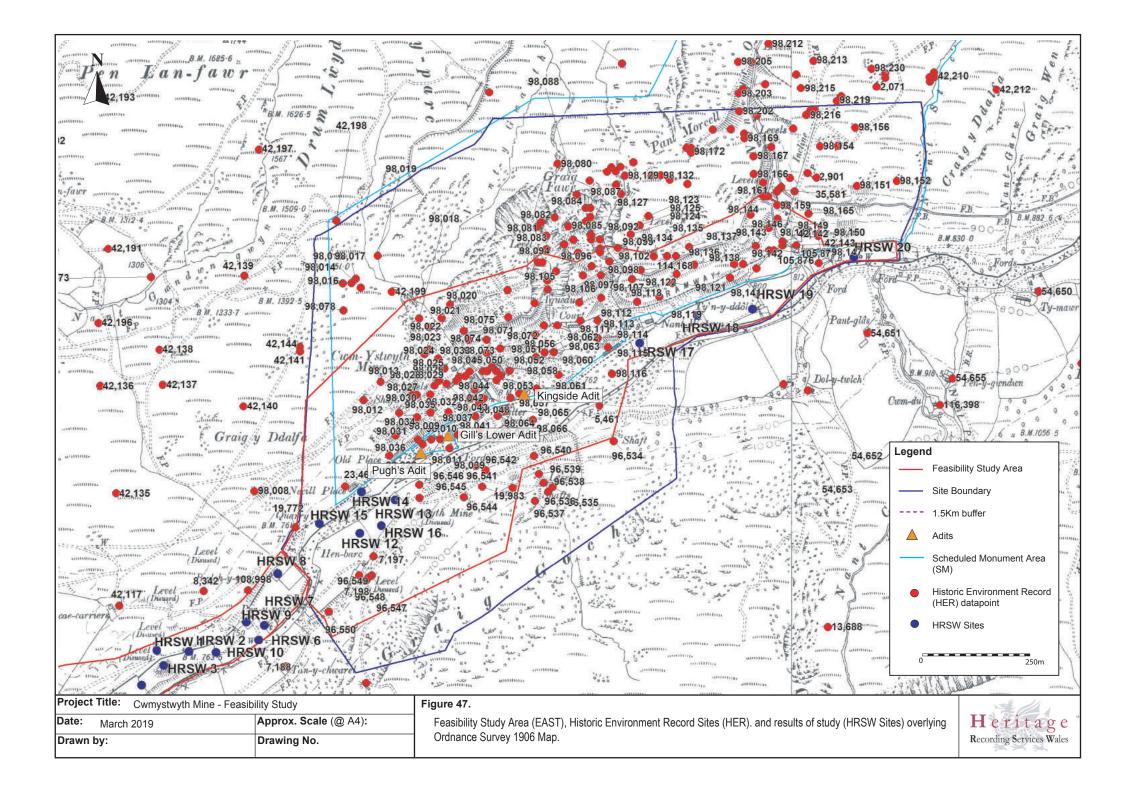


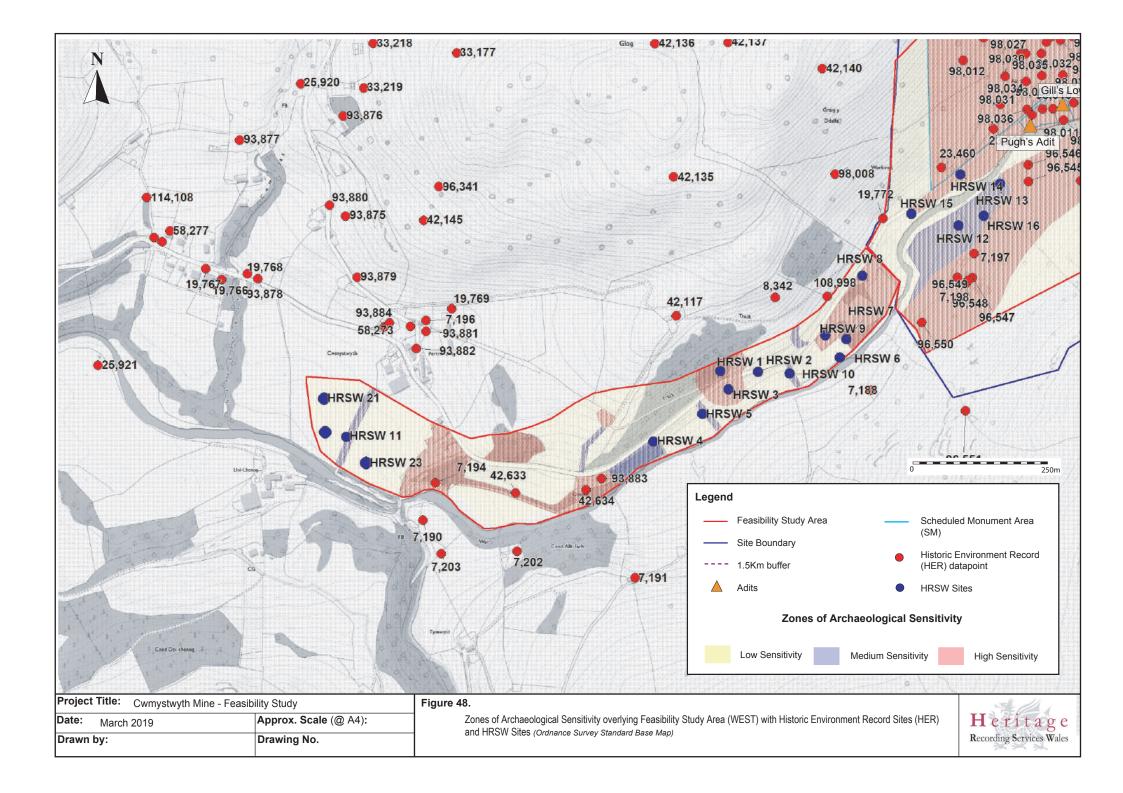


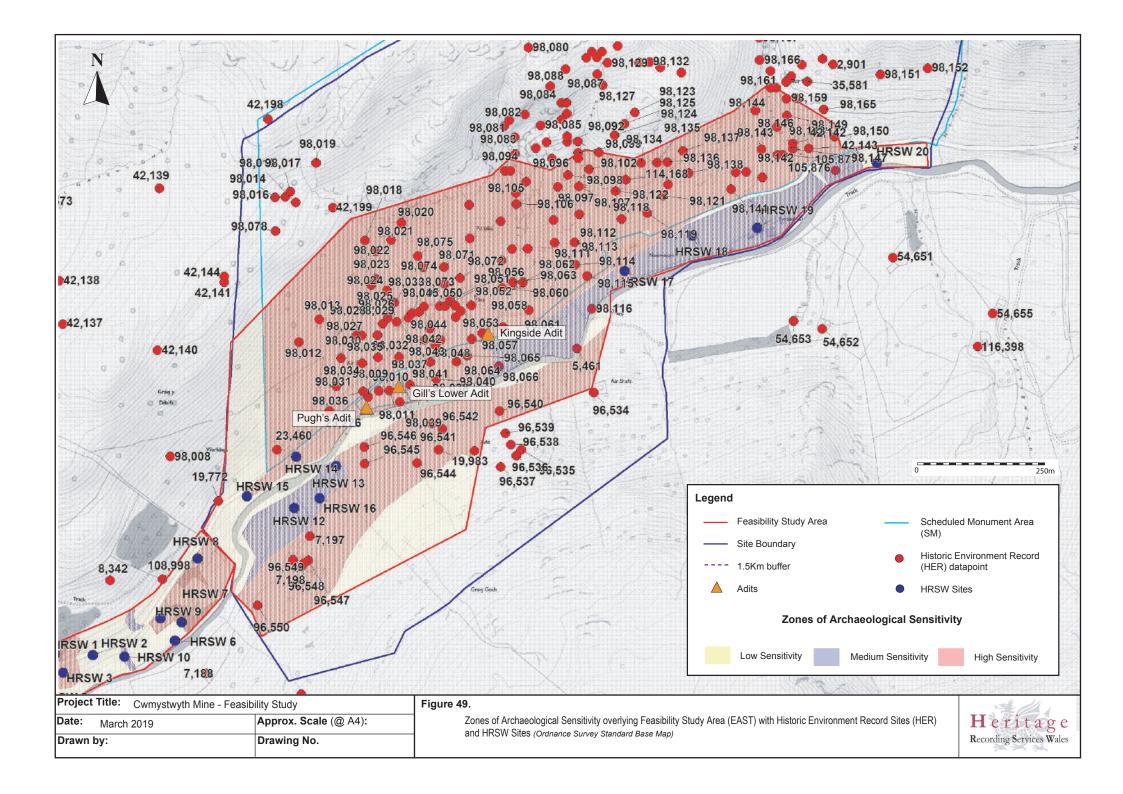












## **APPENDIX II:**

**Photo plates** 



Plate 1. View of Ystwyth Valley looking eastwards towards the Cwmystwyth Mine complex.



Plate 2. View of Cwmystwyth Mine complex. Nevill Place (PRN: 23460) on left in foreground. Looking northeast.

Project Title:	Cwmystwyth Lead Mine - Feasibility Study	Plate No.	01 - 02
Date taken:			

Photographer:

March 2019

Richard Scott Jones





Plate 3. View of Cwmystwyth Mine complex. Ruins of Old Place (PRN: 23226) in foreground. Looking east up the Ystwyth Valley.



Plate 4. View of Cwmystwyth Mine complex. Looking eastwards from central part of mine area. Looking eastwards up the Ystwyth Valley.

Date taken: March 2019

Photographer: Richard Scott Jones

**Plate No.** 03 - 04





Plate 5. View of Cwmystwyth Mine complex. View of tips in main main area. Looking westwards.



Plate 6. View of Cwmystwyth Mine complex. Looking westwards up the Ystwyth Valley from the main mine complex. Cwrt Mine offices in foreground (PRN: 98111).

Project Title:	Cwmystwyth Lead Mine - Feasibility Study	Plate No.
Date taken:	March 2019	

Photographer: Richard Scott Jones







Plate 7. View of Cwmystwyth Mine complex. Looking westwards up the Ystwyth.



Plate 8. View of Cwmystwyth Mine complex. Looking westwards up the Ystwyth Valley from the main mine complex. View of metal pollutants entering river at two points from Pugh's Adit by former Crusher House (PRN: 98010).

**Plate No.** 07 - 08

Date taken:

March 2019

Photographer:

Richard Scott Jones





Plate 9. View of Cwmystwyth Mine (South) complex on southern banks of Ystwyth river. Looking southwest from track alongside ruins of Nevill Place.

Project Title:	Cwmystwyth Lead Mine - Feasibility Study	Plate No.	09
Date taken:	M 1 0040		

March 2019

Richard Scott Jones

Photographer:

Heritage Recording Services Wales



Plate 10. Pugh's Adit. Looking northwest.



Plate 11. Pugh's Adit. Looking northwest.



Plate 12. Outflow from Pugh's Adit. Looking westwards along Ystwyth.



Plate 13. Outflow from Pugh's Adit. Looking eastwards along Ystwyth.



Plate 14. Outflow from Pugh's Adit. Looking westwards along Ystwyth.



Plate 15. Outflow from Pugh's Adit. Looking westwards along Ystwyth.

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 10 - 15





Plate 16. Gill's Lower Adit. Looking north.



Plate 17. View down Ystwyth from Gill's Lower Adit. Looking west towards Crusher House.



Plate 18. Leachig of water from spoil tip alongside Gill's Lower Adit. Looking southwest.



Plate 19. Crusher House between Pugh's and Gill's Lower Adit. Looking northwards.



Plate 20. Crusher House between Pugh's and Gill's Lower Adit. Looking eastwards.



Plate 21. Crusher House and outflow from Gill's Lower Adit. Looking eastwards.

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 16 - 21





Plate 22. Graig Fawr and Nant y Graig watercourse. Looking northeast.



Plate 23. Mill Tailrace on southern side of road between Gill's Lower Adit and Kingside Adit. Looking northwest.



Plate 24. Ruinous stores (PRN:98049) below dressing floor. Looking northwest.



Plate 25. Dressing mill floor and ore bins (PRN: 98047). Looking northeast.



Plate 26. Dressing mill floor and ore bins (PRN: 98047). Looking southeast.



Plate 27. Wall foundations and mounting plates for compressor and turbines (PRN: 98045).

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 22 - 27





Plate 28. Gill's Upper Adit. Looking northeast.



Plate 29. Remains of leat between Pugh's shaft and compressor house. Looking eastwards.



Plate 30. Ruin of mine offices (PRN: 98043). Looking eastwards.



Plate 31. Kingside Shaft (PRN: 98060). Looking southwest.



Plate 32. Kingside Shaft (PRN: 98060) with dumped car. Looking southeast.



Plate 33. Nant y Graig watercourse from Graig Fawr. Cobbled in places. Lookingsoutheast.

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 28 - 33





Plate 34. Court/Cwrt mine offices (PRN: 98111). Looking southeast.



Plate 35. Level Fawr Adit (PRN: 98113) with loan Lord. Looking northeast..



Plate 36. Nant Watcyn watercourse. Looking northeast.



Plate 37. View of Cwmystwyth Mine complex from Level Fawr. Cwrt mine offices n foreground. Looking westwards.



Plate 38. Nant Watcyn watercourse. Looking northwest.



Plate 39. Remains of former level (HRSW 1) alongside highway from Penparc and at base of Glog. Looking north.

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 34 - 39





Plate 40. View looking eastwards at base of tip near Penparc (HRSW 3).



Plate 41. View looking eastwards at base of tip near Penparc (HRSW 3).



Plate 42. View of Ystwyth Valley with Tynddol farmstead in foreground. Far east end of study area. Looking westwards.



Plate 43. View over Cwmystwyth looking eastwards with ruins of Old Place (PRN: 23226) in foreground.



Plate 44. View old South Cwmystwyth Mine. Looking southwest.



Plate 45. Pentre Farm at far west end of study area. Looking eastwards.

Date taken: March 2019

Photographer: Richard Scott Jones

Plate No's. 40 - 45





Plate 46. View of field west of Pentre Farm at far west end of study area. Looking southwest.



Plate 47. View existing information board alongside highway prior to Cwmystwyth village.

Date taken:

March 2019

Photographer: Richard Scott Jones

Plate No's. 46 - 47



## **APPENDIX III:**

**Site Gazetteer** 

## **APPENDIX III**

## Site Gazetteer of all HER Sites, Scheduled Monuments and Listed Buildings within 1.5 Km of Feasibility Study Area

## i) Historic Environment Record Sites (HER)

PRN: 2071 TYPE: Findspot PERIOD: Roman NGR: SN81147520

SITE NAME: CWMYSTWYTH

SUMMARY: COPA HILL

Approximate findspot of a pounding stone and a saddle quern stone, of Roman date found at Copa Hill. They may be

associated with mining work in the area.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 2901 TYPE: Findspot PERIOD: Roman NGR: SN810750

SITE NAME: CRAIG Y DDALFA

**SUMMARY:** Findspot for a pounding stone which may be of Roman date.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 5461 TYPE: Copper Mine;Lead PERIOD: Post-medieval;roman;bronze NGR: SN805745

Mine;Silver Age

Mine;Zinc Mine

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Large scale metal mine at Cwmystwyth. There is evidence that it was mined as early as the Early - Middle Bronze Age for

copper. Also evidence for possible lead workings during the Roman period. All part of a much larger complex of 17th -

20th century lea

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 7188 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79787393

SITE\_NAME: TAN-Y-CHWAREL

SUMMARY: Ruined cottage recorded by RCAHM in 1976 and noted as having clay bonded walls and a wickerwork chimney hood.

RPS September 2001

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 7190 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7891673711

SITE\_NAME: PEN-Y-PONTBREN

SUMMARY: Ruined cottage recorded by RCAHM in 1976 and noted as having a wickerwork chimney hood. RPS September 2001

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 7191 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79327360

SITE NAME: PEN-YR-ALLT

SUMMARY: Ruined cottage recorded by RCAHM in 1976 and noted as having a wickerwork chimney hood. Shown as empty on

1964 6" Ordnance Survey map. RPS September 2001

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 7193 TYPE: Farmhouse PERIOD: POST MEDIEVAL NGR: SN79657375

**SITE\_NAME:** NANT-BYR

SUMMARY: Farmhouse site, believed to have been abandoned. Present condition unknown.

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 7194 TYPE: Cottage;Mill PERIOD: POST MEDIEVAL NGR: SN78977379

SITE\_NAME: PENTRE MILL;MILL COTTAGE

SUMMARY: 'Mill Farm' and 'Mill Cottage' are recorded on the 1st and 2nd edition Ordnance Survey maps respectively, together with

associated building that is the mill, powered by leat (PRN 42633). A possible waterwheel is depicted alongside the east

side wall on t

STATUS: COMMUNITY: Pontarfynach

PRN: 7195 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79437366

SITE NAME: GILFACH-Y-RHIW

SUMMARY: Ruined cottage recorded by RCAHM in 1976 and noted as having a pigsty, byre and a wickerwork chimney hood. RPS

September 2001

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 7196 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78937407

SITE\_NAME: PENTRE BRIWNANT

SUMMARY: Small miners cottage. The last occupied building at the heart of the old village of Pentre Briwnant. Recently restored

as a holiday cottage and a small extension has been added to the western gable.

STATUS: COMMUNITY: Pontarfynach

PRN: 7197 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79977416

SITE\_NAME: HEN BARC

SUMMARY: Cottage recorded by RCAHM in 1976. Present condition unknown. RPS September 2001

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 7198 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7996374119

**SITE\_NAME**: PEN Y PARC

SUMMARY: Ruined cottage recorded by RCAHM in 1976. RPS September 2001

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 7202 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7909573652

SITE NAME: ALLT-FACH

SUMMARY: Single storey ruined cottage recorded by RCAHM in 1976 and noted as having a wickerwork chimney hood. RPS

September 2001

STATUS: COMMUNITY: Pontarfynach

PRN: 7203 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78957365

SITE NAME: ABER-MILWYN

SUMMARY: Ruined cottage recorded by RCAHM in 1976 and noted as having drystone walls. RPS September 2001

STATUS: COMMUNITY: Pontarfynach

PRN: 8342 TYPE: Lead Mine PERIOD: POST MEDIEVAL NGR: SN796741

SITE NAME: CWM YSTWYTH MINE WEST;BRIWNANT;PENTRE BRUNANT;PENSHAFT

SUMMARY: Minor lead mine between Cwmystwyth Mine and Pentre Briwnant village. A series of spoil tips, levels and at least one

open shaft survive. Not a successful venture. Lead ore output-50 tons

STATUS: CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 9355 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79317569

SITE NAME: LLETHR BRITH

SUMMARY: Ruined drystone cottage recorded in 1979. RPS October 2001.

STATUS: COMMUNITY: Pontarfynach

PRN: 9356 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79227572

SITE\_NAME: BLAEN-DYFFRYN

SUMMARY: Ruined 19th century cottage. RPS November 2001

STATUS: COMMUNITY: Pontarfynach

PRN: 9357 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79307554

SITE\_NAME: LLETHR-BRITH

SUMMARY: Llether-brith cottage recorded on the 1888 1st edition and 1905 2nd edition Ordnance Survey maps. Shown only in

outline on Mastermap and can be seen on recent aerial photography (Ordnance Survey, 2009, Next Perspectives) to be

ruinous (M.Ings, 2013)

STATUS: COMMUNITY: Pontarfynach

PRN: 9358 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79317548

SITE\_NAME: PANT-Y-FFYNNON

SUMMARY: Cottage and associated enclosures recorded on the 1888 1st edition and 1905 2nd edition Ordnance Survey maps. Shown

only in outline on Mastermap and seen to be ruinous on recent aerial photography (Ordnance Survey, 2009, Next

Perspectives) (M.Ings, 2013)

STATUS: COMMUNITY: Pontarfynach

PRN: 9359 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79317544

SITE\_NAME: PANT-Y-FFYNNON

SUMMARY: Pant-y-ffynnon miners cottage and associated enclosure is recorded on the 1888 1st edition and 1905 2nd edition

Ordnance Survey maps. Of probable 18th century date. Shown only in outline on Mastermap and identified on recent

aerial photographs (Ordnance

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 9360 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79187540

SITE NAME: TY'N-Y-LON

SUMMARY: Ty'n-y-lon cottage is recorded on the 1888 1st edition and 1905 2nd edition Ordnance Survey maps. A miner's cottage of

probable 18th century date. Now ruinous (M.Ings, 2013)

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 9361 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7910975283

SITE NAME: CNWC-Y-BARCUD

SUMMARY: Ruined miners cottage. Probably 18th century in origin, abandoned in early 20th century.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 9395 TYPE: Long Hut PERIOD: POST MEDIEVAL NGR: SN7822572592

SITE\_NAME: CEFN ČOCH

SUMMARY: Probable long hut site recorded in 1979. A drystone structure located at a streamside on open moorland. RPS October

2001.

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 9396 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79247287

SITE NAME: CASTELL

**SUMMARY:** Ruined 19th century cottage.

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 9397 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79307285

SITE\_NAME: FUCHES

**SUMMARY:** A ruined farmstead shown on the 1st edition OS map of 1891 and named as Fuches. It is depicted as a rectangular building aligned E-W with a small out-shut attached to the east end. It lies on the north side of a small enclosure being a former

garden or p

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 9398 TYPE: Farmstead PERIOD: POST MEDIEVAL NGR: SN79307323

SITE NAME: ESGAIR MILWYN

SUMMARY: Ruined farmstead known to have been in existence by the 1847 Tithe Map and shown on 1st edition Ordnance Survey map

(1888) and abandoned by the early 20th century. The farmstead includes the remains of a large farmhouse and associate

outbuildings set wit

STATUS: COMMUNITY: Pontarfynach

PRN: 9399 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79577290

SITE NAME: MILWYN COTTAGE

SUMMARY: Ruined cottage known as Milwyn cottage shown on 1st edition Ordnance Survey map (1888) and abandoned by the early

20th century. The cottage includes a linear building set in two garden enclosures/paddocks. The outline of the building

is shown on the most

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 9400 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7974272714

SITE\_NAME: BLAEN MILWYN

**SUMMARY:** Ruined 19th century cottage. Now demolished.

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 9401 TYPE: Farmstead PERIOD: POST MEDIEVAL NGR: SN7982772596

SITE\_NAME: BLAEN MILWYN

SUMMARY: Ruined farmstead known as Blaen Milwyn shown on 1st edition Ordnance Survey map (1888). The farmstead includes two

groups of buildings, one including a rectangular two cell farmhouse and the second a group of small rectangular farm buildings in a walled

COMMUNITY:

Ysbyty Ystwyth

STATUS: Site of Special Scientific Interest

PRN: 9402 TYPE: Long Hut;Sheep PERIOD: POST MEDIEVAL NGR: SN79827237

Fold NT V F

SITE\_NAME: NANT Y FAGWR

SUMMARY: Ruinous, drystone long hut. Two cell with a small narrow compartment on the NW side. Survives as stone walls standing

to c.1m high clearly visible on aerial photographs (Next Perspectives, 2009) . A small ancillary structure nearby (PRN

35670) may indi

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 11969 TYPE: Water Mill PERIOD: Medieval NGR: SN7874

SITE\_NAME: CWMYSTWYTH GRANGE

SUMMARY: NGR is indicative only other possible location are SN7973;SN7874;SN7974 RJ 2002

STATUS: COMMUNITY: Pontarfynach

PRN: 12454 TYPE: Grange PERIOD: Medieval NGR: SN7874

SITE\_NAME: BRIWNANT GRANGE;CWMYSTWYTH GRANGE

SUMMARY: PRN given to the extensive Cwmystwyth Grange, which belonged to the Cistercian Strata Florida Abbey (Williams

1990, 57). See also PRN 12453. NDL 2004

STATUS: COMMUNITY: Pontarfynach

PRN: 13606 TYPE: Common Land PERIOD: Medieval; POST MEDIEVAL NGR: SN815760

SITE\_NAME: ESGAIR MAIN GWYNION

SUMMARY: Extensive common north of the Ystwyth valley. Particularly rough and boggy to the north and west, with rather better

areas of pasture available to the east and south.

STATUS: CL:SSSI COMMUNITY: Pontarfynach

PRN: 13673 TYPE: Common Land PERIOD: Medieval; POST MEDIEVAL NGR: SN795748

SITE\_NAME: GLOG

SUMMARY: Block of common north-east of Cwmystwyth village which includes the upper portions of the prominent Glog hill. STATUS: COMMUNITY: Pontarfynach

NGR: SN810740 13688 TYPE: Common Land PERIOD: Medieval:POST MEDIEVAL

GRAIG GOCH; GRAIG DDU SITE\_NAME: SUMMARY: An area of historic common land.

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PERIOD: Medieval; POST MEDIEVAL NGR: SN818747 14127 TYPE: Common Land

SITE NAME: **CRAIG CWMTINWEN** 

**SUMMARY:** A tract of open common land.

COMMUNITY: Blaenrheidol STATUS:

PRN: 19755 TYPE: Aqueduct PERIOD: POST MEDIEVAL NGR: SN77607469

SITE NAME:

SUMMARY: Aqueduct marked on 19th century OS maps but which no longer survives.

STATUS: COMMUNITY: Pontarfynach

**PRN:** 19758 TYPE: Bridge PERIOD: POST MEDIEVAL NGR: SN77267403

SITE\_NAME: PONT PEIRAN

SUMMARY: Single arched bridge of mortared stone. No date stone, though probably of 19th century date. Bridge remains in use. STATUS: COMMUNITY: ESA Pontarfynach

TYPE: Chapel **POST MEDIEVAL** PRN: 19766 PERIOD: NGR: SN78547415

CWMYSTWYTH METHODIST CHAPEL SITE NAME:

SUMMARY: This is the third Methodist chapel in the village and remains in use, the first two being in the old Pentre Briwnant village

core.

STATUS: **FSA** COMMUNITY: Pontarfynach

19767 TYPE: School PERIOD: POST MEDIEVAL NGR: SN78517417 PRN:

CWMYSTWYTH SCHOOL SITE NAME:

**SUMMARY:** Former village school. Now converted into a private house.

STATUS: COMMUNITY: Pontarfynach

**PRN**: 19768 TYPE: Bridge PERIOD: POST MEDIEVAL NGR: SN78597416

SITE NAME: PONT NANT-CAE-GLAS

SUMMARY: Substantial stone bridge which carries the Devils Bridge road over the deeply cut Nant Cae Glas stream in Cwmystwyth

village.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 19769 TYPE: School PERIOD: POST MEDIEVAL NGR: SN78987409

PENTRE BRIWNANT SCHOOL SITE NAME:

SUMMARY: Former chapel turned into a denominational school (Calvinistic Methodist), the roofless shell of which is now maintained

as a walled garden by the occupants of the adjacent dwelling. A plaque commemorating the history of the three

Methodist chapels of C

STATUS: COMMUNITY: **FSA** Pontarfynach

PERIOD: POST MEDIEVAL NGR: SN7984974255 PRN: 19772 TYPE: Quarry

SITE\_NAME: **BWLCH GWYNT** 

SUMMARY: Minor quarry shown as a working quarry on 1906 1:10560 OS map.

STATUS: CL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 19981 TYPE: Aqueduct **PERIOD:** POST MEDIEVAL NGR: SN80367473

SITE\_NAME: NANT Y GWAITH

**SUMMARY:** Site of aqueduct on a leat which supplied the Cwmystwyth lead mine.

COMMUNITY: STATUS: CL;ESA;Scheduled Monument;Site of Special Scientific Interest Pontarfynach

POST MEDIEVAL **PRN:** 19983 NGR: SN8023274323 TYPE: Lead Mine PERIOD:

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: A small unsuccessful metal mining complex on the southern side of the Ystwyth valley opposite the main Cwmystwyth

mining complex.

STATUS: CL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach PRN: 23226 TYPE: Building; Dwelling PERIOD: POST MEDIEVAL NGR: SN80047439

SITE\_NAME: OLD PLACE
SUMMARY: Former mine building.

STATUS: COMMUNITY: Pontarfynach

PRN: 23460 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79947433

SITE\_NAME: NEVILL PLACE

**SUMMARY:** Former miners terraced cottages.

STATUS: Scheduled Monument; Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 25920 TYPE: Lead Mine PERIOD: POST MEDIEVAL NGR: SN787745

SITE\_NAME: TY'N Y GLOG;CWMYSTWYTH WEST;TAINEWYDDION

SUMMARY: Minor lead mine site. Lead ore output-25 tons

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 25921 TYPE: Metal Mine PERIOD: POST MEDIEVAL NGR: SN783740

SITE NAME: HAFOD EAST

SUMMARY: Site of a minor 19th century metal mine working.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 25930 TYPE: Copper PERIOD: POST MEDIEVAL NGR: SN7738973473

Mine;Lead Mine

SITE\_NAME: DOLOGAU;LOGAULAS NEW;PONTYSTWYTH;HAFOD

**SUMMARY:** 19th century metal mine workings.

A shaft or adit c. 3m dia and 2m deep, a 2m wide 15m long trench, and low spoil heaps lie in forestry. KM, DAT, 1999

STATUS: ESA COMMUNITY: Ysbyty Ystwyth

PRN: 25997 TYPE: Metal Mine PERIOD: POST MEDIEVAL NGR: SN7911374759

SITE\_NAME: GWNDWN-GWYN

SUMMARY: No buildings observed by 2001 visit. A spoil tip and some rubble which may originate from buildings is scattered around.

STATUS: CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 26543 TYPE: Farmstead PERIOD: Medieval; POST MEDIEVAL NGR: SN77407375

SITE NAME: CAEGLAS GAWEN - CEFN YR ESGAIR

SUMMARY: Farm depopulated after 1796. CS.Briggs & CR.Kerkham 1988. The location of this farmstead was not examined in the

1996 survey. The site is shown on the 1796 Blake map. KM, DAT, 1996

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 26544 TYPE: Farmstead PERIOD: Medieval; POST MEDIEVAL NGR: SN77577315

SITE\_NAME: CAE NANT Y CAU

SUMMARY: Farm depopulated after 1796. CS.Briggs & CR.Kerkham 1988. A farm is marked here on the 1796 Blake map. The site

is now in a dense forestry plantation. The exact position of the site may be indicated by a scattering of rubble. See

also PRN 33105

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 27940 TYPE: Farmstead PERIOD: POST MEDIEVAL NGR: SN7797673458

SITE\_NAME: CWNC Y FOEL

SUMMARY: Earthworks defining a farmstead. It is not marked on the 1st or 2nd edition 25" maps because area was planted with conifer

forest at the time. This has since been clear-felled. JH.June 1994.

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33018 TYPE: Bridge PERIOD: POST MEDIEVAL NGR: SN77467298

SITE\_NAME: NANT ČAU BRIDGE

SUMMARY: A modern wooden footbridge. Though no bridge is marked on the Ordnance Survey 1:2500 1st Edition, paths lead to this

crossing point - possibly the site of an older bridge? KM DAT 1996

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33023 TYPE: Trackway PERIOD: POST MEDIEVAL NGR: SN77577304

SITE\_NAME: NANT CAU TRACK

SUMMARY: A 3m wide track, in places it runs on a terrace cut into the hillside above Nant Cau. It is still used. KM DAT 1996 STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33024 TYPE: Trackway PERIOD: POST MEDIEVAL NGR: SN77657350

SITE NAME: CAE PANT Y RHEDIG

SUMMARY: A 3m wide track that for part of its course runs on an earthwork terrace. It is still used. KM DAT 1996

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33025 TYPE: Bridge PERIOD: POST MEDIEVAL NGR: SN77477357

SITE NAME: YSTWYTH CHAIN BRIDGE

**SUMMARY:** Thomas Johnes built this bridge as part of this picturesque landscape at Hafod. This bridge is not referred to by

Cumberland in 1795 when the New Walk then continued upstream past this site to the east. It was constructed by 1806,

providing a means by wh

STATUS: ESA;Scheduled Monument COMMUNITY: Ysbyty Ystwyth

PRN: 33026 TYPE: Summerhouse PERIOD: POST MEDIEVAL NGR: SN7743173560

SITE\_NAME: GOTHIC ARCADE; NEW WALK SUMMERHOUSE

SUMMARY: Thomas Johnes of Hafod probably built this as part of his picturesque landscape. It is a very ill-documented site. Its name

is a recent coinage. Payne in 1815 refers to passing under a rude arch of stone, but his description has it on the north

bank of t

STATUS: ESA;Scheduled Monument COMMUNITY: Ysbyty Ystwyth

PRN: 33027 TYPE: Path PERIOD: POST MEDIEVAL NGR: SN77377360

SITE NAME: NEW WALK

SUMMARY: Path under construction in 1786 some 5m above the Ystwyth where the river is cut into a gorge. The path is on a terrace

c.1m wide which is revetted in short stretches with dry-stone walling. Land slippage has eroded long stretches of the

path, and in

STATUS: ESA COMMUNITY: Ysbyty Ystwyth

PRN: 33105 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN77587301

SITE NAME: NANT-Y-CAE

SUMMARY: Cottage. The present dwelling was rebuilt c.1845. The Blake map marks cottages at this location - there is no evidence

for others apart from the standing building, though R Hallet has located the foundations of a barn 25 yards NE of the

House. Remains in

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33170 TYPE: Dam PERIOD: POST MEDIEVAL NGR: SN80407611

SITE NAME: LLYN UCHAF

SUMMARY: Dam of reservoir created to supply water to Cwmystwyth lead mine. Now breached. Section through dam shows it to have

been an earth bank with stone revetting on external sides.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 33171 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79237590

SITE NAME: CWM PERFEDDD

SUMMARY: Ruined upland cottage. RPS October 2001

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33172 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79317555

SITE\_NAME: NANT CWTA I

**SUMMARY:** Ruined upland cottage. RPS October 2001

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33173 TYPE: Sheep Fold PERIOD: POST MEDIEVAL NGR: SN7922575368

SITE\_NAME: NANT CWTA

**SUMMARY:** Small paddock or fold shown on 2nd edition 1:10560 OS map.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33174 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79007539

SITE\_NAME: NANT GÖRLAN II

**SUMMARY:** Ruined upland cottage. RPS October 2001

STATUS: ESA

PRN: 33175 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78917527

SITE\_NAME: NANT GÖRLAN III

SUMMARY: Ruined cottage. RPS October 2001

STATUS: ESA COMMUNITY: Pontarfynach

COMMUNITY:

Pontarfynach

PRN: 33176 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78877524

SITE\_NAME: NANT GÖRLAN IV

**SUMMARY:** Ruined cottage. RPS October 2001

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33177 TYPE: Level;Metal Mine PERIOD: POST MEDIEVAL NGR: SN79007455

SITE\_NAME: GLOG

**SUMMARY:** Minor mine working. Trial workings?

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 33178 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7874274664

**SITE\_NAME:** PENYCWM

SUMMARY: Pen - y-cwm cottage is recorded on the 1905 2nd edition Ordnance Survey map, shown as a two-celled building with

possible adjoined extension on the northwest corner. The site is shown only in outline on Mastermap, presumed ruinous

(M.lngs, 2013)

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33179 TYPE: Level;Metal Mine PERIOD: POST MEDIEVAL NGR: SN78367517

SITE\_NAME: BRYN Y GWYDD

SUMMARY: A minor metal mine level of 19th century date.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33180 TYPE: Mining Feature PERIOD: POST MEDIEVAL NGR: SN78107440

SITE NAME: ALLT GRON

SUMMARY: Identified by CPAT from AP's in 1996. What appear to be two linear cuts, probably trial trenches can be seen in field

corner.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 33218 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78847457

**SITE\_NAME:** TY'N Y LLECHWEDD

SUMMARY: Ruined cottage. There is a rectangular garden plot to the west of the building. Several potato clamps seen on slope to

south of house. Shown as being deserted on 2nd edition 1:10560 OS map of 1906.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 33219 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN78827449

SITE\_NAME: FRON-HAULOG

SUMMARY: Ruined cottage within the late 18th/19th century Tai Newyddion settlement. A garden plot is attached to the cottage

and a number of potato clamps are seen on the bank above the house.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 33591 TYPE: Path PERIOD: POST MEDIEVAL NGR: SN77537303

SITE NAME: CAE CEFN DDWY NANT

SUMMARY: Worn path with no evidence of construction. The modern path takes a slightly different route from that shown on the

Ordnance Survey 1:2500 1st Edition. KM DAT 1996

STATUS: ESA; Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33595 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN77467320

SITE\_NAME: NANT CAU

**SUMMARY:** Earth built bank c.1m high with flanking ditch. KM DAT 1996

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33596 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN77637320

SITE\_NAME: CAE PETHÉRIN

SUMMARY: Earth-built bank 0.3m high topped with some hawthorn and blackthorn and a wire fence. KM DAT 1996

STATUS: Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33597 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN77707337

SITE\_NAME: CAE PETHÉRIN

SUMMARY: Earth bank 0.3m high with the remains of stonework at its North end. It is topped with hawthorn and blackthorn and a

wire fence. KM DAT 1996

STATUS: ESA; Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33598 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN77587341

SITE\_NAME: CAE PETHERIN

SUMMARY: Earth and stone built bank approximately 0.2 - 0.3m high. KM DAT 1996

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 33599 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN77597358

SITE\_NAME: GWASTAD COED

**SUMMARY:** Low earth bank topped by a collapsed rubble wall. KM DAT 1996

STATUS: ESA COMMUNITY: Ysbyty Ystwyth

PRN: 33600 TYPE: Boundary Wall PERIOD: POST MEDIEVAL NGR: SN77597355

SITE NAME: GWASTAD COED

SUMMARY: This is an earth bank 0.8m high faced with very large upright stone slabs. KM DAT 1996

STATUS: ESA COMMUNITY: Ysbyty Ystwyth

PRN: 33601 TYPE: Boundary Wall PERIOD: POST MEDIEVAL NGR: SN77397352

SITE NAME: **GWASTAD COED** 

SUMMARY: Drystone wall, generally in good condition. KM DAT 1996

STATUS: COMMUNITY: Ysbyty Ystwyth

35185 TYPE: Mining Feature PERIOD: POST MEDIEVAL NGR: SN81537586

SITE NAME: BRYN CŎPA LEVEL

SUMMARY: Trial level/adit in SE facing slope to NE of main workings on Copa Hill. Isolated position. No mineral on spoil tip of

slaty shale. Level open, but flooded to half its height due to partial blockage of entrance. Length perhaps 50-100m

judging by amou

STATUS: ESA:Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Reservoir POST MEDIEVAL PRN: 35294 PERIOD: NGR: SN7763374457

SITE NAME: PWLLPEIRAN

SUMMARY: A small water tank or reservoir in woods east of Pwllpeiran. Rectilinear in shape, the tank appears to have a stone

faced earth dam and measures c.33 x 16m. The dam is intact stands over 1m high at present. Water was fed into this

reservoir by a rivete

STATUS: COMMUNITY: Pontarfynach

PERIOD: Medieval:POST MEDIEVAL PRN: 35295 TYPE: Enclosure NGR: SN7756074440

SITE NAME: **BRYN BACH** 

SUMMARY: Faint outline of a denuded, rectilinear, earthwork enclosure measuring c.13 x 13m on a NE-SW axis. Banks have been

long ploughed over and survive at 0.3m high x 3m wide. A shallow gully is seen outside at NE end. Probably associated

with the platform

STATUS: COMMUNITY: Pontarfynach

TYPE: Platform PERIOD: Medieval; POST MEDIEVAL SN77567444 PRN: 35296 NGR:

SITE NAME: **BRYN BACH** 

SUMMARY: Faint platform of undetermined size, being a minimum of 10m long, or a maximum of 20m, x c.7m wide. On NW - SE

axis, with the NW (negative) end best preserved. Sheltered by Bryn Bach hill. Probably associated with the enclosure

PRN 34595, RPS June 1998.

STATUS: COMMUNITY: Pontarfynach

**PRN**: 35581 TYPE: Mine PERIOD: Bronze Age NGR: SN8091574975

SITE NAME: **COPA HILL** 

SUMMARY: Area of Bronze Age Copper mining on the east flank of a steep gulley at CwmYstwyth. The identified remains include

an Early Bronze Age open cast mine 45m x 20m aligned SSW-NNE up to 12m deep, along with surface remains of

drainage channels and waste t

STATUS: Scheduled Monument; Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 35670 TYPE: Shelter PERIOD: Medieval; POST MEDIEVAL NGR: SN79947270

MILWYN SITE NAME:

SUMMARY: Small and ruinous drystone structure. Rectilinear, measuring 4 x 3.5m. Possibly ancillary to PRN 9401. RPS 1998 STATUS: ESA;Site of Special Ścientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 35672 TYPE: Shelter PERIOD: Medieval:POST MEDIEVAL NGR: SN79777231

SITE NAME: NANT Y FAGWR

SUMMARY: Small sub-rectilinear structure, built of earth and stone and measuring 3.5 x 3m. Close to stream bank. Proximity to

PRN 9402 may suggest a link. RPS 1998

ESA;Site of Special Scientific Interest STATUS: COMMUNITY: Ysbyty Ystwyth

TYPE: Long Hut NANT Y DOMEN 35673 PERIOD: Medieval; POST MEDIEVAL NGR: SN80067236

SITE NAME:

SUMMARY: Two cell drystone rectilinear structure, very ruinous, measures 9 x 4m with walls up to 0.75m high. North end is left

open. Stands on slight platform cut into slope. Sheltered by hillslope. RPS 1998

STATUS: ESA;Site of Special Scientific Interest **COMMUNITY:** Ysbyty Ystwyth

PRN: 35674 TYPE: Long Hut; Sheep PERIOD: Medieval;post-medieval NGR: SN80187246

Fold SITE NAME: **CERRIG Y TWRCI** 

Very rough structure measuring 7 x 4m, built of large stones and incorporating large slabs of rock at either end. SUMMARY:

Parallel to stream course, facing downstream. RPS 1998

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

**PRN:** 35916 TYPE: Ring Cairn PERIOD: Bronze Age NGR: SN78437514

SITE NAME:

SUMMARY: Possible Bronze Age ring-cairn, comprising a ring of stones protruding no more than 0.5m through land surface,

sub-circular in form, measuring 7m ENE-WSW x 6m WNW-ESE. May be a land clearance feature or associated with the

reduction of the nearby bounda

STATUS: COMMUNITY: Pontarfynach PRN: 35917 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN78447510

SITE\_NAME: CHATHAM

SUMMARY: A 15m long single row of as many as 12 aligned stones on a WNW-ESE axis, which disappear into a boggy area at the edge

of the field. They are presumed to be the surface remains of a major but now ploughed out boundary bank which is visible

in this area

STATUS: COMMUNITY: Pontarfynach

PRN: 35918 TYPE: Clearance Cairn PERIOD: POST MEDIEVAL NGR: SN78347508

SITE\_NAME: CHATHAM

SUMMARY: A small clearance cairn, 4m in diameter. RPS June 1998.

STATUS: COMMUNITY: Pontarfynach

PRN: 35922 TYPE: Shooting Stand PERIOD: Modern; POST MEDIEVAL NGR: SN79457587

SITE NAME: LLETHR BRITH

SUMMARY: A group of four shooting hides arranged along the break of slope at the top of the steep slope of Llethr Brith, overlooking

the head of the Nant Gorlan valley below. Each stands at the western end of a levelled area and survives in the form of

rumou

STATUS: COMMUNITY: Pontarfynach

PRN: 35923 TYPE: Shooting Stand PERIOD: POST MEDIEVAL NGR: SN79507565

SITE NAME: LLETHR BRITH

SUMMARY: Another group of shooting hides comparable with PRN35922. This group has six hides facing south-west over the

confluence of the Nant Gorlan valley with its tributary, Nant Cwta. Amongst the group is a 14m long dry stone wall base

of unknown association

STATUS: COMMUNITY: Pontarfynach

PRN: 36241 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79237591

SITE NAME: NANT PERFEDD

SUMMARY: Ruinous cottage, probably late 18th or early 19th century in origin. Not shown on the 2":1mile OS map surveyed in

1833-34. Ruinous, but walls relatively intact. RPS OCt 1998.

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 36242 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79207547

SITE\_NAME: ABERNANT CWTA

SUMMARY: Ruinous cottage, probably late 18th or early 19th century in origin. It is named on the 2":1mile Ordnance Survey map

surveyed in 1833-34. Ruinous, but the walls are relatively intact. (RPS Oct 1998)

STATUS: ESA COMMUNITY: Pontarfynach

PRN: 36915 TYPE: Clearance Cairn PERIOD: POST MEDIEVAL NGR: SN7727873987

SITE\_NAME: CAE FELIN

**SUMMARY:** Area of field clearance 10m by 5m composed of boulders and stones.

STATUS: HLW COMMUNITY: Pontarfynach

PRN: 36916 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN7732273968

SITE\_NAME: CAE FELIN

**SUMMARY:** Earth bank topped with a well-maintained multi-species hedge.

STATUS: HLW COMMUNITY: Pontarfynach

PRN: 36917 TYPE: Boundary Bank PERIOD: POST MEDIEVAL NGR: SN7736273816

SITE\_NAME: CAE FELIN

SUMMARY: Low bank 0.5m high composed of coursed earth and stone. No hedge present.

STATUS: HLW COMMUNITY: Pontarfynach

PRN: 42117 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN79417407

SITE\_NAME: PEN-CAE-CARRIERS

SUMMARY: Site of a ruined cottage, now reduced to wall bases. Mid 19th century in origin - does not appear on parish tithe map.

Abandoned by mid-20th century. RPS 2000

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42135 TYPE: Platform PERIOD: Medieval;POST MEDIEVAL NGR: SN79417432

SITE\_NAME: GLOG

SUMMARY: Probable platform of unknown purpose and date, in lee of small hillock. Measures 9m E-W x 4m.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42136 TYPE: Mining Feature PERIOD: POST MEDIEVAL NGR: SN79387456

SITE\_NAME: GLOG

SUMMARY: Linear cut across Glog hill, almost 400m long x up to 2m wide which thought likely to be associated with mining

activity at Cwmystwyth or West Cwmystwyth mines searching for new ore bearing strata. The line of the cut seems to

proceed southwards, downsl

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: PRN: 42137 TYPE: Structure Unknown NGR: SN79527456

SITE NAME: **GLOG** 

Alignment of stone blocks running NE off boundary wall for 4m. 3 large blocks run SW-NE, a fourth forms L-shape. May be SUMMARY:

remains of hut or fold destroyed to build wall.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Deserted Rural Medieval; POST MEDIEVAL PRN: 42138 PERIOD: NGR: SN7951574638

Settlement

SITE NAME: NANT Y GWNDWN-GWYN

SUMMARY: Possible deserted rural settlement complex. All that was visible was a sunken shelter cut into slope, an L-shaped earth

bank which may be one side of an enclosure, and possibly the site of another structure with a stone component,

elements of which could

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42139 TYPE: Deserted Rural PERIOD: Medieval; POST MEDIEVAL NGR: SN79717480

Settlement

NANT GWNDWN-GWYN SITE NAME:

SUMMARY: Terraced platform measuring 8m x 5m with the earthwork outline of a building measuring 7 x 4m visible on it. Wall bases

of the building c. 1m wide and less than 0.2m high. A drainage hood and gully are visible on the upper end of the

platform. This DRS f

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42140 TYPE: Long Hut PERIOD: Medieval; POST MEDIEVAL NGR: SN79707451

SITE NAME: CRAIG Y DDALFA

SUMMARY: Rectilinear long hut, defined by wall base comprising large stone blocks. Measures 11m SW-NE x 5m. In exposed location

at the top of a steep slope overlooking the Ystwyth valley.

STATUS: COMMUNITY: Site of Special Scientific Interest Pontarfynach

POST MEDIEVAL PRN: TYPE: Reservoir PERIOD: NGR: SN79837463 42141

SITE\_NAME: **GRAIG Y DDALFA** 

SUMMARY: A small former reservoir or pond, which is a 15m x 11m depression, defined by a curving earth dam on its southern

side. The dam is c.12m long and up to 1m high. No longer holds water, but may well have served as a hushing pond -

there is evidence of hush

Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

PRN: 42142 TYPE: Deserted Rural PERIOD: POST MEDIEVAL NGR: SN80927486

Settlement

SITE\_NAME: NANT YR ONNEN

SUMMARY: Nant yr Onnen is shown on the parish tithe map of 1847 but not on the earlier Ordnance Survey Original Surveyors

Drawing, surveyed c.1815. Ruinous fragments of the house and a possible ancillary building are visible at the edge of

the Nant vr Onnen strea

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 42143 TYPE: Garden PERIOD: NGR: SN80957485

ABERNANT; NANT YR ONNEN SITE\_NAME:

SUMMARY: Two adjacent garden plots which include lazy bed cultivation. Shown on the Original OS Surveyors Drawings of c.1815

when attached to Abernant (PRN 42146). By 1847, they were clearly associated with a later settlement called Nant yr

Onnen, which was bui

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL 42144 TYPE: Leat PERIOD: NGR: SN79837464 PRN:

GRAIG Y DDALFA SITE\_NAME:

SUMMARY: Leat that runs from a stream source north of Craig y Ddalfa and appears to feed the hushing pond PRN 42141 Site of Special Scientific Interest COMMUNITY: STATUS: Pontarfynach

PERIOD: POST MEDIEVAL 42145 TYPE: Building NGR: SN78937425

SITE NAME: **GLOG** 

SUMMARY: Small stone building, c. 3m x 3m. Walls stand up to 1.5m high and are bonded with lime mortar. Some cement used in construction or repair. Purpose unknown. Probably of recent date.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 42146 TYPE: Farmstead PERIOD: NGR: SN81007481

SITE NAME:

Site of a deserted farmstead. The settlement is shown as occupied and named as Abernant on the early 19th century SUMMARY:

Ordnance Surveyors Original Surveyors Drawings. It is not shown on the parish tithe map 20 years later. Only the stone

foundations of the

STATUS: COMMUNITY: Pontarfynach

POST MEDIEVAL NGR: SN7897374733 PRN: 42188 TYPE: Cottage PERIOD:

**GWNDWN GWYN** SITE NAME:

SUMMARY: Probably a cottage belonging to the Tai Newyddion group of miners dwellings, although the fragmentary remains include

evidence suggestive of this being reused as an agricultural or industrial building at a later stage in its history. The

building compl

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: PRN: 42189 TYPE: Ring NGR: SN80677500 Bronze Age

Barrow;Round Barrow

PANT MORCELL

SITE NAME:

A ring barrow or round barrow. There has been some disturbance of the monument which makes identification imprecise, SUMMARY:

but it appears to be a funerary monument of some kind. It has also been disturbed by the construction of a mine leat,

which cuts through

STATUS: ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: NGR: SN78927465 **PRN:** 42190 TYPE: Cairn Bronze Age

SITE NAME: **GLOG** 

SUMMARY: Possible cairn in the form of a sub-circular mound c.3m x 2.5m. A few large stones are scattered on surface and at least

one edge set slab in centre of mound may be part of a cist. Possibly a clearance feature. RPS 2001.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL NGR: SN7940674864 PRN: 42191 TYPE: Cottage

NANT GWNDWN SITE\_NAME:

SUMMARY: Foundations of a rectilinear building which may have been a cottage in the Tai Newyddion group, or an agricultural

building of some kind. Only the wall bases survive, showing the outline of a building measuring 9m SEE-NWW x 4.5m. A

small section of drys

STATUS: COMMUNITY: **ESA** Pontarfynach

42192 TYPE: Platform PERIOD: Medieval:POST MEDIEVAL NGR: SN79277505 PRN:

LAN FAWR SITE NAME:

SUMMARY: Possible platform, terraced into moderate, west facing hillslope. Measures 11m x 6m and has no evidence of any

structure upon it.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42193 TYPE: Peat Workings PERIOD: POST MEDIEVAL NGR: SN794752

SITE\_NAME: PEN LAN-FAWŘ

SUMMARY: Area of peat cutting which includes a series of peat drying platforms and trackways which deserve more detailed study.

Features of interest include a peat cutters trackway which zig-zags downslope from the worked area to end at

SN79317513. A peat dryi

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

42194 TYPE: Cairn PERIOD: Bronze Age NGR: SN79767563

SITE NAME: **CEFN PANTYGWARTHEG** 

SUMMARY: Hilltop cairn, c.8m in diameter. Appears to have a central cist. Within view of the more substantial Penygarn cairn to the

north. RPS 2001.

STATUS: **FSA** COMMUNITY: Pontarfynach

POST MEDIEVAL NGR: SN80027619 PRN: 42195 TYPE: Peat Stand PERIOD:

SITE NAME: **RHOS PEN-Y-PARC** 

SUMMARY: Probable peat drying platform defined by a 3m length of drystone walling in front of a level platform alongside an area of

peat bog.

COMMUNITY: STATUS: FSA Pontarfynach

PRN: 42196 TYPE: Building PERIOD: Modern NGR: SN79387470

NANT GWNDWN SITE NAME:

SUMMARY: Concrete slab measuring 7m x 3m. Foundation for a timber or tin-sheet structure. Concrete plinths on the slab appear to

have housed machinery. Almost certainly an early 20th century pump house for the water tank on the top of Glog hill.

Water would have

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 42197 TYPE: Peat Stand PERIOD: POST MEDIEVAL NGR: SN79757508 DRUM I WYD SITE NAME:

SUMMARY: Peat drying platform measuring 4m x 2m. A second lies 10m to SW. On natural terrace facing south.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 42198 TYPE: Peat Stand PERIOD: POST MEDIEVAL NGR: SN79927492

**DRUM LWYD** SITE NAME:

SUMMARY: Group of 4 peat drying platforms. STATUS: ESA;Site of Special Scientific Interest

PERIOD: Medieval; POST MEDIEVAL PRN: 42199 TYPE: Longhouse NGR: SN80047476

SITE NAME: NANT Y GWAITH

SUMMARY: Two-celled longhouse situated on a very restricted, sheltered natural terrace overlooking the Cwmystwyth lead mine site.

Access is difficult and it may be that mining carried out since the longhouse was occupied has further isolated the

COMMUNITY:

Pontarfynach

terrace. Overall

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42200 TYPE: Cairn PERIOD: Bronze Age NGR: SN80577526

SITE NAME: NANT WATCYN

SUMMARY: Small cairn, c. 3.5m in diameter and c.0.2m high. Disturbed. Located on a flat, natural terrace. RPS 2003.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42201 TYPE: Peat Stand PERIOD: POST MEDIEVAL NGR: SN80597504

NANT WATCYN SITE NAME:

SUMMARY: Probable peat drying platform. D-shaped, maximum dimensions c.4m x 4m. Southern, downslope side is stone revetted.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42202 TYPE: Long Hut PERIOD: POST MEDIEVAL NGR: SN80497500

NANT WATCYN SITE NAME:

SUMMARY: Ruined drystone building, 7m x 6m. Walls stand to c.1m high. Possibly a longhut. Access difficult. Viewed in poor light.

ESA;Site of Special Scientific Interest COMMUNITY: STATUS: Pontarfynach

TYPE: Shelter PERIOD: POST MEDIEVAL PRN: 42203 NGR: SN80547503

SITE NAME: NANT WATCYN

SUMMARY: Ruined, rectangular building. Drystone walls less than 1m high. Measures 6m x 3m.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42204 TYPE: Peat Stand PERIOD: POST MEDIEVAL NGR: SN80567503

SITE NAME: NANT WATCYN

SUMMARY: Platform measuring 5m N-S x 3.5m with low stone wall across southern, downslope end.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42205 TYPE: Deserted Bural PERIOD: POST MEDIEVAL NGR: SN80557502

Settlement

SITE NAME: NANT WATCYN

SUMMARY: Deserted rural settlement which includes a long hut, a shelter and two peat drying platforms. On moderate slope either

side of the Nant Watcyn stream in an area where access is difficult. RPS 2001

ESA;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

TYPE: Trackway : LLYN UCHAF POST MEDIEVAL PRN: 42207 PERIOD: NGR: SN80197638

SITE NAME:

Section of trackway. Stone revetted base. Runs through a natural saddle, but purpose, point of origin and destination are SUMMARY:

unknown. About 50m of its course is visible.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: Medieval; POST MEDIEVAL PRN: 42210 TYPE: Longhouse NGR: SN81277522

SITE NAME: BLAEN NANT STWC

SUMMARY: Longhouse measures 12m N-S x 5m. Two compartments of equal dimensions, the floor level northernmost or upper

compartment being slightly higher than the southernmost. This indicates that the lower compartment was probably the

animal byre, the upper being

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: Medieval; POST MEDIEVAL NGR: SN81267521 42211 TYPE: Platform

SITE NAME: **BLAEN NANT STWC** 

SUMMARY: This platform is just 5m to the SW of the longhouse at Blaen Nant Stwc. It measures 13m N-S x 5.5m. Some stones are

present on the platform and the bases of lateral walls running N-S either side of the platform, about 4m apart. The N end

is cut slightly

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42212 TYPE: Shelter PERIOD: Medieval; POST MEDIEVAL NGR: SN81417519

SITE NAME: **BLAEN NANT STWC** 

SUMMARY: A small shelter, possibly a goose or fowl pen. Approx. 4m x 2m, this minor stone structure is now ruined and obscured by

thick reed growth. Sheltered by rock outcrop on W side.

STATUS: ESA;Site of Special Scientific Interest **COMMUNITY:** Pontarfynach

TYPE: Shelter PERIOD: Medieval; POST MEDIEVAL **PRN**: 42213 NGR: SN81277523 SITE NAME: BLAFN NANT STWC

SUMMARY: Linear cut 7m x 3m and less than 1m deep. Part of the Blaen Nant Stwc deserted rural settlement complex. ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach STATUS:

PRN: 42214 TYPE: Deserted Rural PERIOD: Medieval; POST MEDIEVAL NGR: SN81267522

Settlement

**BLAEN NANT STWC** SITE NAME:

SUMMARY: Deserted rural settlement located close to the source of Nant Stwc, but in a relatively sheltered position in this mountain

stream valley. Includes a longhouse, platform, shelter and sunken shelter. May also have traces of cultivation ridges to

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42215 TYPE: Longhouse PERIOD: Medieval; POST MEDIEVAL NGR: SN81657530

SITE NAME: GRAIG WEN

SUMMARY: Ruined longhouse. Low, drystone wall bases show that the building had two cells. Overall measurement is 10m N-S x

5m. There are two small "cupboard" niches in the north gable end.

STATUS: ESA; Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 42216 TYPE: Sheep Fold PERIOD: Medieval; POST MEDIEVAL NGR: SN81677533

SITE NAME: GRAIG WEN

SUMMARY: Ruined shelter or small fold measuring 4m square and defined by low, drystone wall bases.

ESA;Site of Special Scientific Interest COMMUNITY: STATUS: Pontarfynach

PERIOD: NGR: SN81667533 PRN: 42217 TYPE: Shelter Medieval:POST MEDIEVAL

SITE\_NAME: **GRAIG WEN** 

SUMMARY: Sunken shelter measuring 11m x 4m. Drystone component.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42218 TYPE: Shelter PERIOD: Medieval; POST MEDIEVAL NGR: SN81697535

SITE\_NAME: **GRAIG WEN** 

SUMMARY: Large sunken shelter, measuring up to 25m x 5m in overall dimensions on a NNE-SSW long axis. One of the biggest

known. Cut into ground surface on a natural terrace to a depth of over 1m at NNE end. The first 13m at the SSE end has

a drystone revetment in

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 42219 TYPE: Shelter PERIOD: Medieval; POST MEDIEVAL NGR: SN81747537

SITE NAME: **GRAIG WEN** 

SUMMARY: Small shelter built against a rock outcrop. Measures 3.5m x 3m with the SE end left open. Defined by low earth and

stone wall banks.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42220 TYPE: Longhouse PERIOD: Medieval; POST MEDIEVAL NGR: SN81757545

SITE\_NAME: GRAIG WEN

SUMMARY: Two-cell longhouse which defined by low stone wall bases. Measures 11m NW-SE x 6m overall. Appended to the SE gable

is an unusual extension, possibly a sunken shelter, which is 7m long and which tapers in its internal width from 3m at

the NW end to 1m

ESA;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 42221 TYPE: Peat Stand PERIOD: NGR: SN81927557

CWM Y GORLAN SITE\_NAME:

SUMMARY: Alongside a prominent natural monolith at the top of a steep slope is an artificial platform, 3.5m square with a low

revetted wall along its SW side. Almost certainly a peat drying platform.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 42223 TYPE: Platform PERIOD: Bronze Age NGR: SN81417540

SITE NAME: **BRYN COPA** 

SUMMARY: A sub-circular platform cut into a south facing slope. c.5m in diameter. Possibly a hut platform. RPS 2001 STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Trial Mine PERIOD: POST MEDIEVAL PRN: 42224 NGR: SN81567580

SITE NAME: **BRYN COPA** 

SUMMARY: Small adit. A trial working with a small spoil tip of development rock present. No minerals observed.

ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach STATUS:

TYPE: Peat Stand PRN: 42225 POST MEDIEVAL NGR: SN81627557 PERIOD:

BRYN COPA SITE NAME:

SUMMARY: An arrangement opf stone slabs in an L-shape 3m x 2m. Situated on a prominent ridge and probably a peat drying

platform. May be derived from a small cairn which has been rearranged.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Sheep Fold POST MEDIEVAL PRN: 42226 PERIOD: NGR: SN8099075882

SITE NAME: **BRYN COPA** 

SUMMARY: Small, irregular drystone sheepfold built in the shelter of a rock outcrop.

STATUS: ESA;Site of Special Scientific Interest **COMMUNITY:** Pontarfynach

PRN: 42227 TYPE: Farmstead PERIOD: POST MEDIEVAL NGR: SN78127398

SITE\_NAME: TY COCH

SUMMARY: Site of farmstead occupied throughout 19th century and into early 20th century. Abandoned by mid-20th century. Not

visited during survey.

STATUS: **ESA** COMMUNITY: Pontarfynach

**PERIOD:** Medieval; POST MEDIEVAL PRN: 42630 TYPE: Settlement NGR: SN78907406

SITE NAME: PENTRE BRIWNANT

SUMMARY: Site of the village of Pentre Briwnant. Few houses remain in occupation and a row of cottages which stood along the main

street in the 19th century have been demolished and little remains to show their location. Pentre Briwnant may have

mediaeval origin

STATUS: **ESA** COMMUNITY: Pontarfynach

PRN: 42633 TYPE: Leat PERIOD: **POST MEDIEVAL** NGR: SN7910073764

SITE NAME: PENTRE MILL

SUMMARY: Mill race associated with Pentre Mill (PRN 7194) recorded on the 1888 1st edition Ordnance Survey map. Partly rock cut,

having intially been diverted along a wooden launder from a weir on the Afon Ystwyth (M.Ings, 2013, from various

sources)

STATUS: **ESA** COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 42634 TYPE: Crushing Mill PERIOD: NGR: SN79237376

PENTRE OFFICE SITE NAME:

SUMMARY: An industrial installation which includes a wheelpit, a probable crushing mill, buddle pits and an area of fine spoil.

Believed to be late 19th century in date and disused by time of 2nd edition 1:10560 OS map. Overlies the early 19th

century leat associ

STATUS: **ESA** COMMUNITY: Pontarfynach

PRN: 52799 TYPE: FARMSTEAD NGR: SN79247497 PERIOD: Post Medieval

TY'N-Y-LAN-FAWR, TANLAN-FAWR SITE NAME:

SUMMARY: Farmstead identified on historic mapping

STATUS: COMMUNITY:

POST MEDIEVAL PRN: 54650 TYPE: FARMSTEAD PERIOD: NGR: SN8149274739

SITE\_NAME: TY MAWR

SUMMARY: A small upland farmstead marked on the 1st edition Ordnance Survey map of 1888.

COMMUNITY: STATUS: Llanfair-ar-y-Bryn

TYPE: COTTAGE **PRN:** 54651 PERIOD: POST MEDIEVAL NGR: SN8110674652

SITE\_NAME: **PANT-GLAS** 

SUMMARY: A small cottage with associated enclosures, marked on the 1st edition Ordnance Survey map of 1888.

STATUS: COMMUNITY: Llangwm and Hook

**PRN**: 54652 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN8096874527

DOL-Y-TWLCH SITE NAME:

**SUMMARY:** A cottage marked on the 1st edition Ordnance Survey map of 1888.

STATUS: COMMUNITY: Eglwyswrw

PRN: 54653 TYPE: FARM BUILDING PERIOD: POST MEDIEVAL NGR: SN8091474542

SITE NAME:

SUMMARY: A ruined mortared stone, rubble-built farm building with associated drystone enclosures to the north. Marked on the

1st (1888) and 2nd (1905) edition Ordnance Survey maps.

STATUS: COMMUNITY: Brawdy

TYPE: FARMSTEAD **PRN:** 54654 PERIOD: POST MEDIEVAL NGR: SN8126474490

SITE NAME: CWM-DU

SUMMARY: A small ruined farmstead complex, marked on the 1st edition Ordnance Survey map of 1888.

COMMUNITY: Cyngor Bro Dyffryn STATUS:

Cennen

**PRN:** 54655 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN8129474549

SITE NAME: PEN-Y-GWNDWN

SUMMARY: A cottage with associated enclosures to the north, marked on the 1st edition Ordnance Survey map of 1888.

STATUS: COMMUNITY: Eglwyscummin PRN: 54656 TYPE: SHEEPFOLD PERIOD: POST MEDIEVAL NGR: SN8158474578

SITE\_NAME:

**SUMMARY:** A small rectangular sheepfold marked on the 1st (1888) and 2nd (1902) edition Ordnance Survey maps.

STATUS: COMMUNITY: Llanboidy

PRN: 55013 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN7887775163

SITE\_NAME: PEN-Y-CWM

SUMMARY: A cottage with associated outbuilding and adjoining enclosures, marked on the 1st edition Ordnance Survey map of

1888.

STATUS: COMMUNITY: Cwm Gwaun

PRN: 55014 TYPE: WELL PERIOD: POST MEDIEVAL NGR: SN7889275143

SITE NAME:

SUMMARY: A well marked on the 1st edition Ordnance Survey map of 1888 associated with adjacent Pen-y-cwm cottage PRN

55013

STATUS: COMMUNITY: Llangoedmor

PRN: 55015 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN7884075131

**SITE\_NAME:** TY'N-Y-LLIDIART

SUMMARY: A large cottage marked on the 1st edition Ordnance Survey map of 1888, wiht associated enclosures lying to the south

and east.

STATUS: COMMUNITY: Templeton

PRN: 55016 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN7914674980

SITE\_NAME: FRON-DALE;FRONDDEL

SUMMARY: A cottage marked on the 1st edition Ordnance Survey map of 1888. Still marked on the 2nd edition map of 1905 but

now appears to have been abandoned.

STATUS: COMMUNITY: St Clears

PRN: 58249 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7758173018

SITE\_NAME: NANTYCAE

**SUMMARY:** Grade II listed cottage

STATUS: Listed Building; Site of Special Scientific Interest COMMUNITY: Ysbyty Ystwyth

PRN: 58273 TYPE: Cottages PERIOD: POST MEDIEVAL NGR: SN7886074067

SITE\_NAME: BRIWNANT COTTAGE AND ATTACHED COTTAGE

SUMMARY: Grade II listed cottages

STATUS: Listed Building COMMUNITY: Pontarfynach

PRN: 58277 TYPE: Cottage PERIOD: POST MEDIEVAL NGR: SN7844374239

SITE\_NAME: GATE COTTAGE

SUMMARY: Grade II listed cottage

STATUS: Listed Building COMMUNITY: Pontarfynach

PRN: 58278 TYPE: Gates and PERIOD: POST MEDIEVAL NGR: SN7842874220

Gatepiers

SITE\_NAME: GATEPIERS AND GATES AT HAFOD LODGE

**SUMMARY:** Grade II listed gates and gatepiers

STATUS: Listed Building COMMUNITY: Pontarfynach

PRN: 58279 TYPE: School PERIOD: POST MEDIEVAL NGR: SN7841274228

SITE\_NAME: HAFOD LODGE SUMMARY: Grade II listed school

STATUS: Listed Building COMMUNITY: Pontarfynach

PRN: 93875 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78787426

SITE\_NAME: OCHR-GLOG

**SUMMARY:** Cottage, identified from historic mapping

STATUS: COMMUNITY: Llanilar

PRN: 93876 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78787444

SITE NAME: PEN-Y-BANC

**SUMMARY:** Cottage, identified from historic mapping

STATUS: COMMUNITY: Llannon

PRN: 93877 TYPE: WELL PERIOD: Post Medieval NGR: SN78587440

SITE\_NAME:

**SUMMARY:** The site of a well, identified from historic mapping

STATUS: COMMUNITY:

PRN: 93878 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78617415

SITE\_NAME: PEN-Y-BONT

**SUMMARY:** Cottage, identified from historic mapping

STATUS: COMMUNITY:

PRN: 93879 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78807415

SITE NAME: PEN-RHIW

**SUMMARY:** Cottage, identified from historic mapping

STATUS:

PRN: 93880 TYPE: FARMSTEAD PERIOD: Post Medieval NGR: SN78757428

COMMUNITY:

COMMUNITY:

**COMMUNITY:** 

SITE NAME: TYN-Y-GLOG

**SUMMARY:** Farmstead identified on historic mapping

STATUS:

PRN: 93881 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78937405

SITE NAME:

SUMMARY: Cottage, identified from historic mapping

STATUS: COMMUNITY:

PRN: 93882 TYPE: FARMSTEAD PERIOD: Post Medieval NGR: SN78917402

SITE NAME: PENTRE FARM

**SUMMARY:** Farmstead identified on historic mapping

STATUS:

PRN: 93883 TYPE: MINE OFFICE PERIOD: Post Medieval NGR: SN79267378

SITE NAME: PENTRE OFFICE

SUMMARY:

STATUS: COMMUNITY: Blaenrheidol

PRN: 93884 TYPE: COTTAGE PERIOD: Post Medieval NGR: SN78857406

SITE\_NAME:

**SUMMARY:** Cottage, identified from historic mapping

STATUS: COMMUNITY:

PRN: 96341 TYPE: Mine Building PERIOD: POST MEDIEVAL NGR: SN78967431

SITE NAME: FRONGOCH LEAD MINE;LISBURNE;LLWYNWNWCH

SUMMARY: A building is recorded at this location on the Ordnance Survey 2nd edition map (1905).

No trace of building (Protheroe-Jones 1993, mine158, no.13).

See PRN 9151 for additional references.

STATUS: CTL;Site of Special Scientific Interest COMMUNITY: PONTARFYNACH

PRN: 96534 TYPE: Shaft PERIOD: POST MEDIEVAL NGR: SN80537442

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: Run in shaft; some masonry on north side; development rock tip (Protheroe-Jones 1993, mine183, no.2).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96535 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80397432

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Run in level (Protheroe-Jones 1993, mine183, no.3).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96536 TYPE: Shaft PERIOD: POST MEDIEVAL NGR: SN80387431

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH SUMMARY: Rockcut shaft: open, water at 30' depth (Protheroe-Jones 1993, mine183, no.4).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96537 TYPE: Shaft PERIOD: POST MEDIEVAL NGR: SN80357429

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Possible run in shaft (Protheroe-Jones 1993, mine183, no.5).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96538 TYPE: Spoil Heap PERIOD: POST MEDIEVAL NGR: SN80377433

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH SUMMARY: Large cascade tip of development rock (Protheroe-Jones 1993, mine183, no.6).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96539 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80367435

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: Run in level (Protheroe-Jones 1993, mine183, no.7).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96540 TYPE: Ore Chute PERIOD: POST MEDIEVAL NGR: SN80357439

SITE NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Remains of ore slide (Protheroe-Jones 1993, mine183, no.8).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96541 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80247436

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: Tramway alignment (Protheroe-Jones 1993,mine183, no.9).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96542 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80227437

SITE NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Leat alignment (Protheroe-Jones 1993, mine183, no.10).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96543 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80307432

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: Stone arched level portal: collapsed at rockhead 30' inside; large cascade tip of development rock (Protheroe-Jones

1993, mine183, no.11).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96544 TYPE: Quarry PERIOD: POST MEDIEVAL NGR: SN80197430

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Quarry and associated tip (Protheroe-Jones 1993, mine 183, no.12).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96545 TYPE: Dressing Floor PERIOD: POST MEDIEVAL NGR: SN80097430

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Razed site of dressing floor (Protheroe-Jones 1993, mine183, no.13).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

NGR: SN80097433 PRN: 96546 TYPE: Spoil Heap PERIOD: POST MEDIEVAL

CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH SITE NAME:

**SUMMARY:** Partially bulldozed mixed tips (Protheroe-Jones 1993, mine183, no.14).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96547 TYPE: Level **PERIOD:** POST MEDIEVAL NGR: SN79977412

SITE NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

SUMMARY: Stone arched level: open, very wet; subsidence hollow above indicating it is probably collapsed at rock head

(Protheroe-Jones 1993, mine183, no.15).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 96548 TYPE: Mine Office PERIOD: POST MEDIEVAL NGR: SN79967411

SITE NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Ruined office (Protheroe-Jones 1993, mine183, no.16).

See PRN 19983 for additional references.

STATUS: ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

96549 TYPE: Mining Feature PERIOD: POST MEDIEVAL NGR: SN79957413 PRN:

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** No remains of structure (Protheroe-Jones 1993, mine 183, no.17).

See PRN 19983 for additional references.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 96550 TYPE: Spoil Heap PERIOD: POST MEDIEVAL NGR: SN79887405

SITE\_NAME: CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH

**SUMMARY:** Large development rock tip (Protheroe-Jones 1993, mine183, no.19).

See PRN 19983 for additional references.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Level PRN: 96551 PERIOD: POST MEDIEVAL NGR: SN79967389

CWMYSTWYTH MINE SOUTH;GRAIGGOCH;CWMYSTWYTH;YSTWYTH SITE NAME:

SUMMARY: Level not visited (Protheroe-Jones 1993, mine183, no.20).

See PRN 19983 for additional references.

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98008 **TYPE:** Trial Level PERIOD: POST MEDIEVAL NGR: SN79727432 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

"Trial level with concreted over and corrugated sheet covered entrance. Cascade od development rock down hillside. Termed 'Boundary Adit' by S.J.S.Hughes' " (RPJ, 1993, Mine no.182, Site no.1). SUMMARY:

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL NGR: SN80107442 PRN: 98009 TYPE: Adit CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME: SUMMARY: "Pugh's Adit - rock cut, open, wet. Very ocherous discharge" (RPJ, 1993, Mine no.182, Site no.5).

See PRN 5461 for further references.

STATUS: CL:CTL:ESA:Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98010 TYPE: Rock Crusher PERIOD: POST MEDIEVAL NGR: SN80127443

House CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SITE NAME: SUMMARY: Building recorded within the Cymystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map.

"No.1 Crusher House - very ruinous; sub basement only survives apart from south pine-end. Wheelpit on east side

converted into flight of (external)

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest **COMMUNITY:** Pontarfynach PRN: 98011 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80147443

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Gills Lower Adit - run in" (RPJ, 1993, Mine no.182, Site no.7).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98012 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN79977452 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:CPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Run-in adit and large tip cascade of development rock down hillside; termed "Graig y Ddalfa Adit" by S.J.S. Hughes"

(RPJ, 1993, Mine no.182, Site no.8)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98013 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80017456
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Raw's Adit; stone arched, small, open, damp. Large cascade of orey tip down hillside" (RPJ, 1993, Mine no.182, Site

no.9)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98014 TYPE: Trench;Trial Level PERIOD: POST MEDIEVAL NGR: SN79937478 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Grassy trial trench" (RPJ, 1993, Mine no.182, Site no.10) recorded within Cwmystwyth lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98015 TYPE: Trench;Trial Level PERIOD: POST MEDIEVAL NGR: SN79977477
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Grassy trial trench" (RPJ, 1993, Mine no.182, Site no.10) recorded within Cwmystwyth lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL:ESA:Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98016 TYPE: Trial Mine (lead) PERIOD: POST MEDIEVAL NGR: SN79957478 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Two grassy collapsed trial pits" (RPJ, 1993, Mine no.182, Site no.11) recorded within Cwmystwyth lead mine (PRN

5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98017 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN79967479
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Grassy run-in level. Termed 'Pentrefach Mine' by S.J.S. Hughes" (RPJ, 1993, Mine no.182, Site no.12) recorded

within Cwmystwyth lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98018 TYPE: Pipeline PERIOD: POST MEDIEVAL NGR: SN80107470 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Route of high pressure pipeline, well marked by minor eartworks, rock cuttings and fragments of steel pipes" (RPJ,

1993, Mine no.182, Site no.13).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98019 TYPE: Sluice PERIOD: POST MEDIEVAL NGR: SN80017484 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Masonary sluice box at head of high pressure section of pipeline (PRN 98018)" (RPJ, 1993, Mine no.182, Site no.14).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98020 TYPE: Adit;Level PERIOD: POST MEDIEVAL NGR: SN80177473

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Level recorded within Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map.

"Rosa Adit: rock cut, open, damp. No discrete tip" (RPJ, 1993, Mine no.182, Site no. 16)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98021 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80157470 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut adit, reopened in recent years. Not marked by S.J.S. Hughes" (RPJ, 1993, Mine no.182, Site no.17).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98022 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80127468 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rockcut Adit; open, small, dry, Termed 'Nant y Gwaith Adit' by S.J.S.H. Hughes. Immediately above is a small area of

subsidence into a stope; this may be the minor opencast termed 'Nant y Gwaith opencast' by S.j.S. Hughes but

apparently mislocated "450

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98023 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80127463 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Site of Nant Trefach Adit; no remains apart from a flow of water from a drain at foot of retaining wall" (RPJ, 1993, Mine

no.182, Site no.19).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98024 TYPE: Magazine PERIOD: POST MEDIEVAL NGR: SN80117462 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Small square building recorded within the Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey

map.

"Magazine in good condition, on top of development tip from PRN 98023" (RPJ, 1993, Mine no.182, Site no.19).

See PRN 5461 for further

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98025 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80147461
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Leat feeding Pugh's Shaft waterwheel" (RPJ, 1993, Mine no.182, Site no.21 &22). Virtually no trace of leat left in parts

and other remains are poor.

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98026 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80147459 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Virtually no trace of leat" (RPJ, 1993, Mine no.182, Site nos. 23, 75 & 78). Leat, aligned northeast-southwest, appears

to run parallel and to the south of leat PRN 98025.

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98027 TYPE: Launder PERIOD: POST MEDIEVAL NGR: SN80087453 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Feed from leat (PRN 98025) to waterwheel (PRN 98028) recorded within Cwmystwyth lead mine (PRN 5461) on the 1888

1st edition Ordnance Survey map.

"No trace of launder from upper leat to waterwheel (according to O.S 1st edition plan) and from middle leat

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Wheelpit POST MEDIEVAL PRN: 98028 PERIOD: NGR: SN80097453

CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: Rectilinear structure - probable wheelpit - recorded within the Cwmystwyth lead mine (PRN 5461) on the 1888 1st

edition Ordnance Survey map.

"No trace of wheelpit for pumping and winding Pugh's Shaft" (RPJ, 1993, Mine no.182, Site no.25).

STATUS: CL:CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98029 PERIOD: POST MEDIEVAL NGR: SN80147456 TYPE: Leat CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: Tailrace from wheelpit (PRN 98028) recorded within Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition

Ordnance Survey map.

"Virtually no sign of tailrace" (RPJ mlne no.182, Site no.26) found during survey of the mine.

See PRN 5461 for further refe

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

NGR: SN80057449 PRN: 98030 TYPE: Mine Shaft PERIOD: POST MEDIEVAL CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: Shaft recorded within the Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map.

"Pugh's Shaft - run-in, remains of masonary angle bob pit on east side but no sign of other structures" (RPJ, 1993, Mine

no.182, Site no.27).

See PRN 5

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

TYPE: Waste Tips POST MEDIEVAL PRN: 98031 PERIOD: NGR: SN80047444 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME: SUMMARY: "Large tip of orey and development rock from shaft (PRN 98030)" (RPJ, 1993, Mlne no.182, Site no.29).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 98032 TYPE: Gulley;Tramway PERIOD: POST MEDIEVAL NGR: SN80127453 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

"Gulley on tramway alignment shown on 1st edition Ordnance Survey plan (1888)" (RPJ, 1993, Mine no.182, Site no. SUMMARY:

31).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 98033 PERIOD: NGR: SN80137455 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

SUMMARY: Level recorded within the Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map.

"Gill's Upper Adit - drystone arch; patially demolished at entrance; open, wet" (RPJ, 1993, Mine no.182, Site no.31)

See PRN 5461 for further reference

CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

PRN: 98034 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80097448 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Extensive orey coarse tips" (RPJ, 1993, Mlne no.182, Site no.32) recorded within Cwmystwyrh lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL 98035 CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME:

SUMMARY: Building recorded within Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map. "Very ruinous engine house" (RPJ, 1993, Mlne no.182, Site no.33).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 98036 TYPE: Waste Tips PERIOD: POST MEDIEVAL CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Extensive development rock tip", large area removed on northeast side, (RPJ, 1993, Mine no. 182, Site nos.34 & 35).

See PRN 5491 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98037 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80167449
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Lefely Ffordd: run in; wooden props visible as it enters tips" (RPJ, 1993, Mine no.182, Site no.36) recorded within

Cwmystwyth lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98038 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80187444 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Finger' tip from PRN 98037 of development rock" (RPJ, 1993, Mine no.182, Site no.38) recorded within Cwmystwyth

lead mine (PRN 5461).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98039 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN 80167441 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Extensive area of water-modified orey tips, much of it medium to fine" (RPJ, Mine no.182, Site no.39).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98040 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80237445 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large, much disturbed tip, medium to coarse, orey. Recent refuse tipping on surface" (RPJ, 1993, Mine no.182, Site

no.40).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98041 TYPE: Tramway Bridge PERIOD: POST MEDIEVAL NGR: SN80227448 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** Tramway bridge recorded within Cwmystwyth lead mine (PRN 5461) on the 1888 1st edition Ordnance Survey map.

"No trace of bridge over road for tramway shown on 1st edition O.S. plan" (RPJ, 1993, Mine no.182, Site no.41) found

during survey of the mine.

Se

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98042 TYPE: Incline PERIOD: POST MEDIEVAL NGR: SN80217452 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Alignment of incline shown on 2nd edition Ordnance Survey plan, much disturbed but traceable by fragments of surviving

retaining walls" (RPJ, 1993, Mine no.182, Site no.44).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98043 TYPE: Mine Office PERIOD: POST MEDIEVAL NGR: SN80167455 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Buildings recorded within the Cwmystwyth lead mine (PRN 5461) on the 1905 2nd edition Ordnance Survey map.

"Mine offices: very ruinous; fronts virtually gone; pine-ends partially collapsed; rear walls mostly intact. Ditto Smithy at

east end" (RPJ, 1993, M

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98044 TYPE: Incline PERIOD: POST MEDIEVAL NGR: SN80187456

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Fragmentary remains of head of incline (PRN 98042) and no trace of timber trestle bridge to south" (RPJ, 1993, Mine

no.182, Site no.47)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98045 TYPE: Loading Stage PERIOD: POST MEDIEVAL NGR: SN80177458 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Building recorded within Cwmystwyth lead mine (PRN 5461) on the 1905 2nd edition Ordnance Survey map.

"Masonary foundations and loadings for compressor and turbine, in good condition" (RPJ, 1993, Mine no.182, Site

no.48)

See PRN 5461 for further referen

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98046 TYPE: Tramway Bridge PERIOD: POST MEDIEVAL NGR: SN80207457 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Minimal traces of timber trestle bridge carrying tramway to ore bins and crusher at rear of dressing mill" (RPJ, 1993,

Mine no.182, Site no.50).

See PRN 5461 for further references.

STATUS: CL:CTL:ESA:Scheduled Monument; Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98047 TYPE: Dressing Floor PERIOD: POST MEDIEVAL NGR: SN80227454 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Large building recorded within the Cwmystwyth lead mine (PRN 5461) on the 1905 2nd edition Ordnance Survey map.

"Dressing Mill floor and loadings in concrete with masonary retaining walls at north (rear) with brick quoins. Good

condition. Modern handrail

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98048 TYPE: Gas Works PERIOD: POST MEDIEVAL NGR: SN80237451 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Fragmentary remains of gas plant" (RPJ, 1993, Mine no. 182, Site no.52).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98049 TYPE: Mine Building PERIOD: POST MEDIEVAL NGR: SN80247452 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: Building recorded within Cwmystwyth lead mine (PRN 5461) on the 1905 2nd edition Ordnance Survey map.

"Ruinous stores, walls more or less standing to wall plate level" (RPJ, 1993, Mine no.182, Site no.53)."

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98050 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80247458 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Tramway alignment shown on (1888) 1st edition Ordnance Survey plan survives as a track" (RPJ, 1993, Mlne no.182,

Site no.54

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98051 TYPE: Rock Crusher PERIOD: POST MEDIEVAL NGR: SN80267459

House

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "No.2 crusher house: mostly intact apart from northeast corner. Wheelpit 20' x 4'6" ruinous; south wall demolished, scrap

filled" (RPJ, 1993, Mine no.182, Site no.55).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98052 TYPE: Smithy PERIOD: POST MEDIEVAL NGR: SN80277458
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Smithy - ruinous; west wall gone completely, other walls poor" (RPJ, 1993, Mine no.182, Site no.56)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98053 TYPE: Mine Building PERIOD: POST MEDIEVAL NGR: SN80287457
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Outline of buildings south of Smithy (PRN 98052) barely traceable" (RPJ, 1993, Mine no.182, Site no.57)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98054 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80277456

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Slight cutting on course of tramway" (RPJ, 1993, Mine no.182, Site no.58)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98055 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80307458 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Minimal traces of tailrace from wheelpit (PRN 98051) to wheelpit (PRN 98058)" (RPJ, 1993, Mine no.182, Site no.59)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98056 TYPE: Retaining Wall PERIOD: POST MEDIEVAL NGR: SN80257458 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Ruinous retaining wall with flight of steps at east end" (RPJ, 1993, Mine no.182, Site no.60)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98057 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80307452 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Fine tips" (RPJ, 1993, Mine no.182, Site no.61)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98058 TYPE: Wheelpit PERIOD: POST MEDIEVAL NGR: SN80327453 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "No trace of wheelpit for pumping and winding Kingside Shaft (PRN 95860)" (RPJ, 1993, Mine no.182, Site no.65)

See PRN 5461 for further references.

STATUS: CL:CTL:ESA:Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98060 TYPE: Mine Shaft PERIOD: POST MEDIEVAL NGR: SN80367461 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Kingside Shaft: run-in; masonary collar partially exposed. Masonary angle bobpit to southwest in fair condition.

Subsidence crater at northern edge of shaft" (RPJ, 1993, Mine no. 182, Site no.65)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98061 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80367454 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Kingside Adit: run-in" (RPJ, 1993, Mine no.182, Site no.66)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98062 TYPE: Dressing Floor PERIOD: POST MEDIEVAL NGR: SN80407462 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Low degraded walls on site of 18th century dressing floors" (RPJ, 1993, Mine no.182, Site no.67)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98063 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80387462 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Track on site of tramway alignment shown on 1st edition (1888) Ordnance Survey plan. No remains of bridge over Nant y

Graig to east" (RPJ, 1993, Mine no.182, Site no.68)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98064 TYPE: Culvert PERIOD: POST MEDIEVAL NGR: SN80277448 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Stone lined channel and arched masonary culvert under road" (RPJ, 1993, Mine no.182, Site no.69)

See PRN 5461 for further references.

CL;CTL;ESA;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

98065 NGR: SN80297449 PERIOD: POST MEDIEVAL PRN: **TYPE:** Filter House CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

**SUMMARY:** Filter beds recorded on the 1905 2nd edition Ordnance Survey map. "No remains of filter beds" (RPJ, 1993, Mine no.182, Site no.70).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98066 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80357447 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME: SUMMARY: "Extensive area of water-modified orey tips, much of it medium to fine" (RPJ, 1993, Mine no.182, Site no.71)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

NGR: SN80417457 PERIOD: POST MEDIEVAL PRN: 98067 TYPE: Waste Tips SITE\_NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SUMMARY: "Complex of orey medium and coarse tips, partiall grass-grown" (RPJ, 1993, Mine no. 182, Site no.72)

See PRN 5461 for further references.

CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

NGR: SN80367466 PRN: 98068 TYPE: Tramway PERIOD: POST MEDIEVAL CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Tramway alignment intact save for bridge over Nant y Graig to east of which nothing remains. Retaining wall along

north side of west end of tramway" (RPJ, 1993, Mine no.182, Site no.73).

See PRN 5461 for further references.

CL:CTL:ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

PRN: 98069 POST MEDIEVAL NGR: SN80387468 TYPE: Adit PERIOD: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

"Dick's Adit: run-in" (RPJ, 1993, Mine no.182, Site no.74). SUMMARY:

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98070 TYPE: Magazine PERIOD: POST MEDIEVAL NGR: SN80307470 SITE\_NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Magazine - in good condition" (RPJ, 1993, Mine no.182, Site no.77)

See PRN 5461 for further references.

CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

NGR: SN80257465 PRN: 98071 TYPE: Incline PERIOD: POST MEDIEVAL CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME: SUMMARY: "No remains of incline apart from rear wall of drum house" (RPJ, 1993, Mine no.182, Site no.79)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 98072 PERIOD: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME:

"Minimal remains of leat, leading to site of water assisted ore picking grate (no remains) at east end" (RPJ, 1993, Mine SUMMARY.

no.182, Site no.80).

See PRN 5461 for further references.

CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

POST MEDIEVAL NGR: SN80257462 PRN: 98073 TYPE: Mine Structure PERIOD: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Minor remains of structure shown by S.J.S.Hughes. Leat (PRN 98072) intact from here westwards" (RPJ, 1993, Mine

no.182. Site no.81)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98074 TYPE: Ore Chute PERIOD: POST MEDIEVAL NGR: SN80217465 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight remains of oreslide down development tips" (RPJ, 1993, Mine no.182, Site no.82)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98075 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80207467
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Mitchel's Adit - run in; drystone entrance walls visible" (RPJ, 1993, Mine no.182, Site no.83).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98076 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80307476 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Tramway alignment in good condition; bridge over Nant y Graig to west collapsed but masonary abuttments intact" (RPJ,

1993, Mine no.182, Site no.84).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98077 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80377482 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level; open, wet (marked by S.J.S. Hughes as being 100' north of this position)" (RPJ, 1993, Mine no.182, Site

no.86).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98078 TYPE: Hush PERIOD: POST MEDIEVAL NGR: SN79937472 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Small hush channel" (RPJ, 1993, Mine no.182, Site no.87).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98079 TYPE: Tramway Bridge PERIOD: POST MEDIEVAL NGR: SN80217458 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Tramway bridges over Nant y Gwaith: upper one ruinous, lower one washed away completely" (RPJ, 1993, Mine no.182,

Site no.88).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98080 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80427504
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Small leat tipping over edge of cliff: very weathered and grassy" (RPJ, 1993, Mine no.182 centre, Site no. 1)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98081 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80377490 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Small stope come to surface (marked but not named by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.3)

See PRN 5491 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98082 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80387491
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Small stope containing pool of water (not marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182, Site no.4).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL PRN: 98083 TYPE: Level;Opencast NGR: SN80397488

Lead Working

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

"Large opencast / trench: 25' wide x 30' dep x 90' long; two open rock cut levels in cliff on north side, and rock cut arch SUMMARY:

through cliff on south side (All three not marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.6).

See PRN 5461 for

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL 98084 TYPE: Level;Stope NGR: SN80417492 PRN: PERIOD: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

"Narrow opencast/trench: 3' wide x 30' deep (maximum) x 50' long; gives access to a stope at its eastern end; just east of it is an open rock cut level (Both not marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.7). SUMMARY:

See PRN 5461 for furt

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98085 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80447490 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: Two rockcut levels: western one is hand cut and quite small, and blocked by a fall just inside entrance; the eastern one

is only a niche (both not marked by S.J.S.Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.8).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 98086 PERIOD: POST MEDIEVAL NGR: SN80437486

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Three stopes come to surface: open; very large and deep. (All three not marked by S.J.S.Hughes)" (RPJ, 1993, Mine

no.182 centre, Site no.9)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98087 PERIOD: POST MEDIEVAL TYPE: Level;Opencast NGR: SN80487494

Lead Working SITE NAME: CWMYSTWYTH MINE; KINGSIDE; PUGH'S; COPPER HILL; COPA HILL; CRAIG-Y-MWYN; MAY

SUMMARY: "Opencut/trench: 150' long; up to 8' wide and 25' deep; stope comes to surface near its centre; just south of it is a

rockcut level (neither marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.11)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98088 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80467497 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME: SUMMARY: "Rock cut level; open (not marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.12)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL 98089 PERIOD: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME: SUMMARY: "Rock cut level; open (not marked by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.13)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL PRN: 98090 TYPE: Stope NGR: SN80497492 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

SUMMARY: "Stope come to surface in bottom of deep trench/ opencast 70' long and up to 15' wide (not marked by S.J.S. Hughes)"

(RPJ, 1993, Mine no.182 centre, Site no.14).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach PRN: 98091 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80487491 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run in level (Rock cut) at base of cliff, just north of two large subsidence craters in a large area of development rock

scree (not marked by S.J.S.Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.15).

See PRN 5461 for further references.

STATUS: CL:CTL:ESA:Scheduled Monument:Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98092 TYPE: Opencast Lead PERIOD: POST MEDIEVAL NGR: SN80497487

Working

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large, deep opencast (trench containing precipitous scree sloping down to stopes (PRN 98086); bridge rails exposed

near eastern end" (RPJ, 1993, Mine no.182 centre, Site no.16)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98093 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80497488 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Rock cut level, open (termed "Top Tramway Adit" by S.J.S. Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.17)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98094 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80397485
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "No trace of level marked on 1st (1888) and 2nd (1905) edition Ordnance Survey plans, at bottom of shallow

opencast/trench running up to open stopes (PRN 98086)" (RPJ, 1993, Mine no.182 centre, Site no.18)

opencas/trenchituming up to open stopes (Find 30000) (NF3, 1335, Millie no. 102 Centre, Site no. 10)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98095 TYPE: Drum PERIOD: POST MEDIEVAL NGR: SN80457487

House;Incline;Waste

ips

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Medium to fine orey tips sloping down to level platform at head of incline and site of incline drum house (no remains)"

(RPJ, 1993, Mine no.182 centre, Site no.19).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98096 TYPE: Incline PERIOD: POST MEDIEVAL NGR: SN80467484 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Uppermost 100' of incline prominently marked by embankment - virtually all of remainder has vanished" (RPJ, 1993,

Mine no.182 centre, Site no.20).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98097 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80477479 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run-in level (not marked by S.J.S.Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.22).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98098 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80497481 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Course of tramway generally reasonably well preserved although much covered by scree in places" (RPJ, Mine no. 182

centre, Site no.23).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98099 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80517485 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Steel ore adit: open; rockcut; medium tips at entrance" (RPJ, 1993, Mine no.182 centre, Site no.25).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;SSSI COMMUNITY: Pontarfynach

PRN: 98100 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80517484 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "No trace of level marked by S.J.S.Hughes" (RPJ, 1993, Mine no.182 centre, Site no.26)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98101 TYPE: Trench PERIOD: POST MEDIEVAL NGR: SN80557485
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight trench on lode; no trace of level marked by S.J.S. Hughes and termed by him 'Nant Watcym Adit'" (RPJ, 1993, Mine

no. 182 centre, Site no.27).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98102 TYPE: Compressor PERIOD: POST MEDIEVAL NGR: SN80537482

House

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Ruins of compressor house - mainly footings; no sign of Turfstack Adit marked by S.J.S.Hughes" (RPJ, 1993, Mine

no.182 centre, Site no.28)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98103 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80387482 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock-cut level; open (marked by S.J.S.Hughes as being 100' north of this position)" (RPJ, 1993, Mine no.182 centre,

Site no.29)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98104 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80417480 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Three entries marked by S.J.S.Hughes: no sign of the northerly two, the southernmost one is a stope come to surface

and is open" (RPJ, 1993, Mine no.182 centre, Site no.30).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98105 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80397478 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Stope come to surface; open" (RPJ, 1993, Mine no.182 centre, Site no.31)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98106 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80397476 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level; open" (RPJ, 1993, Mine no.182 centre, Site no.33).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98107 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80517479 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large well preserved leat; no trace of aqueducts over Nanty Graig or over Nant Watcyn" (RPJ, 1993, Mlne no.182

centre, Site no.34).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98108 TYPE: Dressing Mill PERIOD: POST MEDIEVAL NGR: SN80517474 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large retaining wall and slight ruins (footings) of dressing mill of 1887/8. Much finely crushed waste downslope" (RPJ,

1993, Mine no.182 centre, Site no.36)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98109 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80467473 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Moderately large, well-preserved leat; no trace of aqueducts over streams" (RPJ, 1993, Mine no.182 centre, Site no.37)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98110 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80417468
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "John Oliver's Adit: run-in" (RPJ, 1993, Mine no.182 centre, Site no.40)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98111 TYPE: Mine Office PERIOD: POST MEDIEVAL NGR: SN80447467 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Court/Cwrt: mine offices, pre 1847: ruinous; western end collapsed" (RPJ, 1993, Mine no.182 centre, Site no.41)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98112 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80507469 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Tramway alignment in good condition but no trace of bridges over Nant y Graig and Nant Watcyn; track on site of

older tramway alignment from Lefel Fawr (PRN 98112) westwards much eroded and bridge over Nant y Graig

disappeared" (RPJ, 1993, Mine no.182 c

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98113 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80507469 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Lefel Fawr: drystone arched portal; plaque above missing; remains of modern gate at portal. Open; some water" (RPJ,

1993, Mine no.182 centre, Site no. 43)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98114 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80507465 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Coarse orey tips with considerable areas of finer, hand crushed waste. Some mortar stones" (RPJ, 1993, Mlne no.182

centre, Site no.44)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98115 TYPE: Barracks PERIOD: POST MEDIEVAL NGR: SN80527461
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight remains (footings) of barracks" (RPJ, 1993, Mine no.182 centre, Site no.45)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98116 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80537457 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Much disturbed coarse tips" (RPJ, 1993, Mine no.182 centre, Site no.46)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98117 TYPE: Culvert PERIOD: POST MEDIEVAL NGR: SN80537457 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Masonary wall with a small square aperture and a small arch - formerly culverts for Nant Watcyn, but stream has diverted

itself to west." (RPJ, 1993, Mine no.182 centre, Site no.47)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98118 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80597473 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Fairly distinct length of leat" (RPJ, 1993, Mine no.182 centre, Site no.49)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98119 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80647474 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Level: run in, but open subsidence hole just above site of portal. (termed "Upper Cross Adit" by S.J.S.Hughes)" (RPJ,

1993, Mine no.182 centre, Site no.50)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98120 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80687479 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Moderately distict length of leat" (RPJ, 1993, MIne no.182 centre, Site no.52)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98121 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80677477 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Well preserved leat" (RPJ, 1993, Mine no.182 centre, Site no.51) ?continuation of PRN 98109.

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98122 TYPE: Ore Bin PERIOD: POST MEDIEVAL NGR: SN80587478 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Ruinous ore bins - masonary. Fronts have collapsed downslope" (RPJ, 1993, Mine no.182 centre, Site no.53)

See PRN 5461 for further references.

STATUS: CL:CTL:ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98123 TYPE: Hush PERIOD: POST MEDIEVAL NGR: SN80627492 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Hushes; grassy and shallow, but distinct" (RPJ, 1993, Mine no.182 centre, Site no.56)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98124 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80587488 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Bench in tip - probably site of a level (not marked by S.J.S.Hughes)" (RPJ, 1993, Mine no.182 centre, Site no.58)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98125 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80607490
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Evans' Level: open, rock-cut, very wet; and associated development tip" (RPJ, 1993, Mine no.182 centre, Site no.59).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98126 TYPE: Dam PERIOD: POST MEDIEVAL NGR: SN80517487

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Collapsed masonary dam approx. 8' high" (RPJ, 1993, Mine no.182 centre, Site no.61)

Se PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98127 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80567497 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:CPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Henry's Roman Adit: rockcut, open, wet. Hand cut and small. No tip" (RPJ, 1993, Mine no.182 centre, Site no.62)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98128 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80557499 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level; open; wet" (RPJ, 1993, Mine no.182 centre, Site no.63)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98129 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80577501 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Two slight leats, much degraded - almost certainly fed dam PRN 98132" (RPJ, 1993, Mine no.182 centre, Site no.64)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98130 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80537502 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "No trace of stope listed by S.J.S.Hughes and termed by him 'Sheepfold Stope' " (RPJ, 1993, Mine no.182 centre, Site

no.65)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98131 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80637501
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight leat feeding dam PRN 98132; very weathered and quite steep" (RPJ, 1993, Mine no.182 centre, Site no.67)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98132 TYPE: Dam PERIOD: POST MEDIEVAL NGR: SN80657501 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Hushing dam: earth banks 4' high" (RPJ, 1993, Mine no.182 centre, Site no.68)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98133 TYPE: Hush PERIOD: POST MEDIEVAL NGR: SN80717499
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Hushes - grassy and shallow but distinct. One of them cuts a bronze age cist (see paper record)" (RPJ, 1993, Mine

no.182 centre, Site no.69)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98134 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80637483 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "No trace of level; only a hollow on line of lode" (RPJ, 1993, Mine no.182 centre, Site no. 70)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98135 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80667483 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Taylor's Shaft: rock cut, open, Stone built balance/angle bob pit to east" (RPJ, 1993, Mine no.182 centre, Site no.71)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98136 TYPE: Flat Rods PERIOD: POST MEDIEVAL NGR: SN80687483 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Groove on line of rods to Taylor's Shaft" (RPJ, 1993, Mine no.182 centre, Site no.72)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98137 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80717485 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Tramway alignment and large development rock tip from Taylor's Shaft" (RPJ, 1993, Mine no.182 centre, Site no.73)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98138 TYPE: Engine House PERIOD: POST MEDIEVAL NGR: SN80727481 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight ruins of engine house for engine which pumped and wound Taylor's Shaft: fragmentary masonary in a hollow"

(RPJ, 1993, Mine no.182, centre, Site no.75)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98139 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80817481 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Fairly degraded length of leat" (RPJ, 1993, Mine no.182 centre, Site no.77)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98140 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80837481 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Slight trace of leat" (RPJ, 1993, Mine no.182 centre, Site no.78)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98141 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80807478 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Cross Road Adit: masonary arch; partially run in; open. Large development tip extends to west" (RPJ, 1993, Mine no.182

centre, Site no.79)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98142 TYPE: Tunnel PERIOD: POST MEDIEVAL NGR: SN80897484
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Small 'cut & cover' tunnel on tramway has collapsed" (RPJ, 1993, Mine no.182 centre, Site no.80)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98143 TYPE: Incline PERIOD: POST MEDIEVAL NGR: SN80867485 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Well preserved remains of Incline with 10' high retaining walls on upper part of formation" (RPJ, 1993, Mine no.182

centre, Site no.81)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98144 TYPE: Drum House PERIOD: POST MEDIEVAL NGR: SN80857492 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Well preserved drum house at head of incline (PRN 98143). No remains of bridge which carried tramway to Taylor's

Adit" (RPJ, 1993, Mine no.182 centre, Site no.82).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98145 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80867480 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Very slight trace of tramway alignment" (RPJ, 1993, Mine no.182 centre, Site no.83).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98146 TYPE: Level;Mine Shaft PERIOD: POST MEDIEVAL NGR: SN80897489 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large rock sided crater on site of Pengeulan Shaft; rockcut level in its NNW side (open, wet). No trace of pumping and

winding waterwheel pit" (RPJ, 1993, Mine no.182 centre, Site no.85)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98147 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80927485 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Pengeulan Adit: run in; drystone entrance walls visible" (RPJ, 1993, Mine no.182 centre, Site no.87)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98148 TYPE: Agricultural PERIOD: POST MEDIEVAL NGR: SN80927486

Building

SITE NAME: CWMYSTWYTH MINE:KINGSIDE;PUGH'S:COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Agricultural ruin" (RPJ, 1993, Mlne no.182 centre, Site no.88)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98149 TYPE: Agricultural PERIOD: POST MEDIEVAL NGR: SN80917491

Building

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Agricultural ruin" (RPJ, 1993, Mine no.182 centre, Site no.89)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98150 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN81007487

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Masonary arched adit; open; and associated large tip of mixed development and orey rock. Termed 'Blue Adit' by S.J.S.

Hughes in error - Adit PRN 98152 is actually Blue Adit" (RPJ, 1993, Mine no.182 centre, Site no.90)

See PRN 5461 for further reference

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98151 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN81097498 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level, open, wet, and very extensive orey tip cascade down hillside. Termed 'Pengeulan Top Adit' by S.J.S

Hughes" (RPJ, 1993, Mine no.182 centre, Site no.93)

See PRN 5461 for further references.

STATUS: CL:CTL:ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98152 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN81187499
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Blue Adit; rockcut, open, wet and tip cascade down hillside. Termed "Pengeulan East Adit" or "Nant Stwc Adit" by

S.J.S.Hughes" (RPJ, 1993, Mine no.182 centre, Site no.93)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

POST MEDIEVAL PRN: 98153 TYPE: Trench:Trial Mine PERIOD: NGR: SN80987501

(lead)

SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Five prospecting trenches" (RPJ, 1993, Mine no.182 centre, Site no.95)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 98154 PERIOD: POST MEDIEVAL NGR: SN81017507 TYPE: Level CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Run in level and grassy development tip" (RPJ, 1993, Mine no.182 centre, Site no.96)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 98155 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN81057507 CWMYSTWYTH MINE; KINGSIDE; PUGH'S; COPPER HILL; COPA HILL; CRAIG-Y-MWYN; MAY SITE NAME:

SUMMARY: "Run in level and grassy development tip" (RPJ, 1993, Mine no. 182 centre, Site no.97)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98156 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN81097511 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run in level and development tip" (RPJ, 1993, Mine no.182 centre, Site no.98)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98157 **TYPE:** Abuttment;Tramway **PERIOD**: POST MEDIEVAL NGR: SN80937494

ridge

CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME:

"Drystone abutments of tramway incline bridge over leat; dilapidated drystone slab-type footbridge over leat" (RPJ, 1993, SUMMARY:

Mine no.182 centre, Site no.99)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 98158 TYPE: Incline PERIOD: POST MEDIEVAL NGR: SN80947500 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

"Incline alignment in good condition; slightly entrenched into hillside; some evidence for a foundation of stone SUMMARY: blocks/slats laid normal to slope: to 'key' sleepers into place" (RPJ, 1993, Mine no.182 centre, Site nos. 86 & 101)

See PRN 5461 for furth

CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

PRN: 98159 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80917494 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

SUMMARY: "Prominent ore-rich medium to coarse tip from Taylor's Level (PRN 98160)" (RPJ, 1993, MIne no.182 centre, Site

no.102)

See PRN 5461 for further references.

CL:CTL:ESA:Scheduled Monument:Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

**PRN:** 98160 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80887499

CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

"Taylor's Level: brick arch covered by masonary; original entrance cutting aligned south (as shown by Ordnance Survey on SUMMARY:

2nd 1905 edition plan) has been filled by rock and gravel washed in by river and a modern, narrow drystone wall lined

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN:** 98161 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80887496 CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME:

SUMMARY. "Run-in level - drystone entrance walls visible at head of grassy tip. Termed 'Burrell's No.3 Adit' by S.J.S. Hughes"

(RPJ, 1993, Mine no.182 centre, Site no.104)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98162 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80897496 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Collapsed stope - wide crater. Termed 'Burrell's Stope' by S.J.S. Hughes" (RPJ, 1993, Mine no.182 centre, Site no.105)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98163 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80917497 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rockcut level; open, dry. Termed 'Burrell's no.4 Adit' by S.J.S.Hughes" (RPJ, 1993, Mine no.106 centre, Site no.106)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98164 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80927498 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run in level and associated coarse development rock tip to south. At the western end of the entrance cutting is a small

drystone lined shaft approximately 2'0" square, open. Neither is marked by S.J.S.Hughes" (RPJ, 1993, Mine no.182

centre. Site no.107)

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98165 TYPE: Leat PERIOD: POST MEDIEVAL NGR: SN80987492 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Poorly preserved leat" (RPJ, 1993, Mine no.182 centre, Sitye no.108)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98166 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80867501
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Freeman's or 26 fathom level: drystone arched, narrow, open, dry; no tip; subsidence crater in leat above level" (RPJ,

1993, Mine no.182 centre, Site no.110)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98167 TYPE: Aqueduct PERIOD: POST MEDIEVAL NGR: SN80867505 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Concrete and masonry remains of dam and aqueduct; no remains of sluice just upsteam shown by Ordnance Survey on

(1905) 2nd edition plan" (RPJ, 1993, Mine no.182 centre, Site no.111)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98168 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80907507 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

**SUMMARY:** "Run-in level not shown by S.J.S..Hughes" (RPJ, 1993, Mine no.182 centre, Site no.112)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98169 TYPE: Level;Stope PERIOD: POST MEDIEVAL NGR: SN80847509
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Weathered narrow stope come to surface. Termed "Ancient Cut" by S.J.S. Hughes and "Level" by Ordnance Survey. The

other level shown by the O.S. on the 2nd edition (1905) plan just north of it appears not to exist, unless it is a

mislocation for PRN 9817

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98170 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80847510 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level, commodious, open, wet, termed "Alderson's Deep Trial" by S.J.S. Hughes" (RPJ, 1993, mlne no.182

centre. Site no.114).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98171 TYPE: Opencast Lead PERIOD: POST MEDIEVAL NGR: SN80817511

Working;Stope

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Small opnoast / subsidence trench, termed "Jackilass Stope" by S.J.S.Hughes" (RPJ, 1993, Mine no.182 centre, Site

no.115)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98172 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80727506 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Jackilass's Day Level: rock cut, open, partially run in at entrance, and associated wheelbarrow development tip.

Termed "Day Level" or "Copper Level" by S.J.S.Hughes" (RPJ, 1993, Mine no.182 centre, Site no.116)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98173 TYPE: Ore Bin PERIOD: POST MEDIEVAL NGR: SN80727507 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Ore bin: well preserved; masonary" (RPJ, 1993, Mine no.182 centre, Site no.117).

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98174 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80717507 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Jackilass's Level: run in. S.J.S. Hughes notes a stope '100 yards east of Jackilass Adit' which he terms 'Jackilass Stope'

but no trace of it was found. (RPJ, 1993, Mine no.182 centre, Site no.118)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98175 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80777511 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Tramway alignment largely obscured by scree; some bridge rails exposed (at arrow on annotated map)" (RPJ, 1993,

Mine no.182 centre, Site no.119)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98202 TYPE: Revetment PERIOD: POST MEDIEVAL NGR: SN80837515 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Retaining walls to contain tip from stream" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.120)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98203 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80837519 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Alderson's Adit: rock cut, open, dry. Breached dam just inside with discharge pipes set at floor level, also a walkway

(for access to site of valves) on east side. No remains of tramway bridge over stream. Large orey development tip"

(Protheroe-Jones 1

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98204 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80877514 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Tramway alignment well preserved" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.122)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98205 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80837526

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Herbert's Adit: rock cut, open, wet. Breached dam just inside. No remains of tramway bridge over stream"

(Protheroe-Jones, 1993, Mine no.182 centre, Site no.123)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98206 TYPE: Chimney PERIOD: POST MEDIEVAL NGR: SN80867526
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Chimney (masonry) survives on site of small cabin" (Protheroe-Jones, 1993, Mine no. 182 centre, Site no.124)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98207 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80277520 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Large orey development tip from Herbert's Adit (PRN 98205)" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.125)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98208 TYPE: Revetment PERIOD: POST MEDIEVAL NGR: SN80847520 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Retaining wall to contain tip (PRN 98207) from stream" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.126)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98209 TYPE: Tramway PERIOD: POST MEDIEVAL NGR: SN80897521
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Tramway alignment well preserved" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.127)

Se PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98210 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80877533
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Stope come to surface with modern drystone collar. Termed "Herberts's Shaft" by S.J.S.Hughes. A concrete overflow

channel leads southeastwards towards Nant yr Onen. No trace of level termed "Herbert's Trial" by S.J.S. Hughes"

(Protheroe-Jones, 1993, Min

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98211 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN80887538
SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

**SUMMARY:** "Herbert's Stope: 15' wide x 50' long; open and deep. Stream drops into it from north. To south east is a level area

probably used for hand dressing ore, cut at the north by a 8' wide x 4' deep channel formerly used to divert Nant yr Onen

into the stope

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98212 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN80907530 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Bonsall's Adit: rock cut, almost closed by rockfall at portal. Orey development tip with flat area at adit mouth,

MARY: "Bonsall's Adit: rock cut, almost closed by rockfall at portal. Orey development tip with flat area at adit mou probably used for hand dressing ore" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.131)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98213 TYPE: Adit;Level PERIOD: POST MEDIEVAL NGR: SN81007526
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock cut level, open, wet. Termed "Smelthouse Adit" by S.J.S.Hughes. Just WNW of portal is a subsidence hollow taking

a small waterflow. The tip is almost entirely development rock" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.

132)

See PRN 5461

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98214 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80967523

SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Run-in level and associated grassy tip" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.133)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98215 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80977520 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Run-in level and associated grassy tip" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.134)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98216 TYPE: Ore Bin PERIOD: POST MEDIEVAL NGR: SN80987514 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: Two ore bins; front walls are much collapsed; alignment of tramway siding in front of them (Protheroe-Jones, 1993, Mine

no.182 centre, Site no.135)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98217 TYPE: Mine Building PERIOD: POST MEDIEVAL NGR: SN80997515 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SUMMARY: "Masonry drum house for incline. Well preserved" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.136)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98218 TYPE: Adit PERIOD: POST MEDIEVAL NGR: SN81007515
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "King's Adit; rock cut, open wet" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.137)

See pRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98219 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN81057517 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run-in level and small associated orey development rock tip. Not marked by S.J.S.Hughes" (Protheroe-Jones, 1993,

Mine no.182 centre, Site no.138)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98220 TYPE: Stope PERIOD: POST MEDIEVAL NGR: SN81067518 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Stope come to surface; open, deep. Not marked by S.J.S.Hughes" (Protheroe-Jones, 1993, Mine no.182 centre, Site

no.139)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98221 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN81067518 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rock-cut level - open, but immediately enters stopes in floor. Not marked by S.J.S.Hughes. Orey development rocktip"

(Protheroe-Jones, 1993, Mine no.182 centre, Site no.139)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98222 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80957497
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Run-in level and small development tip" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.140)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98223 TYPE: Adit POST MEDIEVAL PERIOD: NGR: SN80957511 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Queen's Adit; almost closed by rockfall, wet, rockcut. Entrance cutting much infilled by rockfalls and material washed

down hush" (Protheroe-Jones, 1993, Mine no.182 centre, Site no.141)

See PRN 5461 for further references.

STATUS: CL:CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98224 PERIOD: POST MEDIEVAL NGR: SN81117534 TYPE: Hush CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

SUMMARY: "Hushes - wider ones indicated by hatching. All radiate from dam (PRN 98226)" (Protheroe-Jones, 1993, Mine no.182

east end, Site no.2)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PERIOD: POST MEDIEVAL NGR: SN81137537 PRN: 98225 TYPE: Leat SITE NAME: CWMYSTWYTH MINE; KINGSIDE; PUGH'S; COPPER HILL; COPA HILL; CRAIG-Y-MWYN; MAY

"Leat (or hush) from dam (PRN 98226) to opencast; generally rather narrow and at a far lesser gradient than hushes SUMMARY:

(PRN 98224)" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.3)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

**PRN**: 98226 PERIOD: POST MEDIEVAL NGR: SN81127541 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Dam: earth banks 4'6" high; stone lined outlet at west end" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.4)

See PRN 5461 for further references.

CL:CTL:ESA:Scheduled Monument:Site of Special Scientific Interest STATUS: COMMUNITY: Pontarfynach

PRN: 98227 PERIOD: POST MEDIEVAL TYPE: Leat NGR: SN81037565 CWMYSTWYTH MINE; KINGSIDE; PUGH'S; COPPER HILL; COPA HILL; CRAIG-Y-MWYN; MAY SITE NAME: SUMMARY:

"Leat; rather ephemeral and weathered. Not readily traceable across tips north of the dam (PRN 98226)"

(Protheroe-Jones, 1993, Mine no.182 east end, Site no.5)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

98228 TYPE: Mine Shaft PERIOD: POST MEDIEVAL NGR: SN81167522 CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME: SUMMARY: "Collapsed shaft in centre of opencast" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.7)

See PRN 5461 for further references..

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98229 TYPE: Open Cast Mine PERIOD: POST MEDIEVAL NGR: SN81167523 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE\_NAME:

SUMMARY: "Opencast: highly weathered, mainly filled with coarse development rock from shaft (PRN 98228) and with weathered

debris off sides. Archaeological excavation in progress at western end" (Protheroe-Jones, Mine no.182 east end, Site

See PRN 5461 for

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98230 PERIOD: POST MEDIEVAL NGR: SN81137524 CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY SITE NAME:

"Run-in level with grassy tip; 20' to east is a small stope come to surface - open; wet (termed 'Comt Adit' by S.J.S. SUMMARY:

Hughes)" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.10)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98231 TYPE: Trial Mine PERIOD: POST MEDIEVAL NGR: SN81277535 CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY SITE NAME:

SUMMARY: "Four trial trenches and two trial pits, grassy and weathered" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.11)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98232 TYPE: Mine Building PERIOD: POST MEDIEVAL NGR: SN80897536 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Minor ruins of what may be Wm. Wallers's Stamping mill - part of a wheelpit possibly represented. Much obscured by

later tipping from east" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.12)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98233 TYPE: Waste Tips PERIOD: POST MEDIEVAL NGR: SN80977547
SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Extensive area of massive mixed tips - much development rock but also extensive areas of hand crushed waste and orey

waste. Each bench almost certainly represents the site of a level but only three are definitely identifiable (PRNs

98234-98236). Small s

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98234 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80927539
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Run-in level; drystone side walls visible" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.14)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98235 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80977541
SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY
SUMMARY: "Run-in level; drystone side walls visible" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.15)

See PRN 5461 for further references.

STATUS: CL;CTL:ESA:Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98236 TYPE: Level PERIOD: POST MEDIEVAL NGR: SN80997543 SITE NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Run-in level; long drystone sidewalls visible (identified as Abraham's Adit by S.J.S.Hughes)" (Protheroe-Jones, 1993,

Mine no.182 east end, Site no.16)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98237 TYPE: Mining Feature PERIOD: POST MEDIEVAL NGR: SN81107559 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Rake: about 7' wide, 70' long and up to 25' deep; fill is subsiding exposing stemples" (Protheroe-Jones, 1993, Mine

no.182 east end, Site no.19)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98238 TYPE: Open Cast Mine PERIOD: POST MEDIEVAL NGR: SN81117556 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Shallow opencast - weathered and grassy, and associated tip" (Protheroe-Jones, 1993, Mine no.182 east end, Site

no.20)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98239 TYPE: Trial Mine PERIOD: POST MEDIEVAL NGR: SN81137551 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Small trial shaft or pit; grassy" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.21)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98240 TYPE: Trial Mine PERIOD: POST MEDIEVAL NGR: SN81167552 SITE\_NAME: CWMYSTWYTH MINE;KINGSIDE;PUGH'S;COPPER HILL;COPA HILL;CRAIG-Y-MWYN;MAY

SUMMARY: "Small trial shaft or pit; grassy" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.21)

See PRN 5461 for further references

STATUS: CL;CTL;ESA;Scheduled Monument;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 98241 TYPE: Trial Mine (lead) PERIOD: POST MEDIEVAL NGR: SN81217557 SITE NAME: CWMYSTWYTH MINE:KINGSIDE:PUGH'S:COPPER HILL:COPA HILL:CRAIG-Y-MWYN:MAY

SUMMARY: "Trial trench; grassy" (Protheroe-Jones, 1993, Mine no.182 east end, Site no.23)

See PRN 5461 for further references.

STATUS: CL;CTL;ESA;Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 100640 TYPE: Findspot PERIOD: Prehistoric NGR: SN780741

SITE NAME: GWARAKITY, LLANFIHANGEL Y CREYDDYN UPPER

**SUMMARY:** Findspot for a roughly oval stone which shows perforations of both sides

STATUS: COMMUNITY:

PRN: 105305 TYPE: Air Crash Site PERIOD: Modern NGR: SN7973

SITE NAME: HAWKER HUNTER F.6 XE649

SUMMARY: This Hunter was one of 100 delivered between February 1956 and February 1957 by Hawkers at Kingston to contract

6/Aircraft/9629. It service life included assignments to 66/92/combat vehicle Fighter Ground Attack; 9/8/8-43/208/229

Operational Conversion U

STATUS: Protected Place; Site of Special Scientific Interest COMMUNITY: Aberystwyth

PRN: 105876 TYPE: Metal Working PERIOD: Bronze Age;Roman NGR: SN80907484

Site

SITE\_NAME: BANC TYNDDOL

SUMMARY: An area of Roman and medieval lead smelting hearths. The area is located on a terrace on the lower slopes of the Ystwyth

valley in an area of multi period lead mining. The site was first identified from documentary references and then

confirmed through f

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 105877 TYPE: Grave PERIOD: Bronze Age NGR: SN80907484

SITE\_NAME: BANC TYNDDOL

SUMMARY: A Bronze Age grave containing a gold decorative disc discovered during excavations of a medieval metal working site

(PRN 105876). Despite significant disturbance from animal burrowing and actions of the later metal workers a grave was

identified. This in

STATUS: Site of Special Scientific Interest COMMUNITY: Pontarfynach

PRN: 108998 TYPE: Toll Road PERIOD: POST MEDIEVAL NGR: SN79707410

SITE NAME:

SUMMARY: Toll road from Rhayader to Devils bridge shown as mostly unfenced on the Old Series O.S. mapping. Managed by the

upper district Road Board.

STATUS: COMMUNITY: Many

PRN: 109380 TYPE: Corn Drying Kiln PERIOD: Post Medieval NGR: SN7739873700

SITE\_NAME: HAFOD

**SUMMARY:** The remains of a corn drying kiln recorded in 2016.

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 114108 TYPE: LANDSCAPE PERIOD: NOT APPLICABLE NGR: SN784743

SITE\_NAME: HAFOD SUMMARY: Historic Background

In the Medieval Period, this part of the Ystwyth valley lay in Strata FloridaÔ\_s Grange of Cwmystwyth (Williams 1990,

57). By 1513 Hafod Uchdryd was leased as a farm, and a rent roll of 1545-50 indicates that all farms of the former

STATUS: COMMUNITY: Pontarfynach

PRN: 114125 TYPE: LANDSCAPE PERIOD: NOT APPLICABLE NGR: SN783740

SITE\_NAME: PWLLPEIRAN SUMMARY: Historic Background

In the Medieval Period this area formed part of Strata Florida AbbeyÔ\_s Cwmystwyth Grange (Williams 1990). By at least the later Middle Ages the grange had been divided into farms that were leased out and farmed on a commercial

basi

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 114167 TYPE: LANDSCAPE PERIOD: NOT APPLICABLE NGR: SN787750

SITE\_NAME: LLUEST SUMMARY: Historic Background

This area lay within Strata Florida AbbeyÔ\_s Cwmystwyth Grange. Upon the Dissolution, its unenclosed character ensured

that the Crown claimed it. In the late 18th and early 19th century squatters began to occupy portions of this une

STATUS: COMMUNITY: Pontarfynach

PRN: 114168 TYPE: LANDSCAPE PERIOD: NOT APPLICABLE NGR: SN806748

SITE\_NAME: CWMYSTWYTH METAL MINES

**SUMMARY:** Historic Background

This historic landscape area has been defined by the mining industry. Archaeological excavations have demonstrated that opencast copper mining was undertaken here in the Bronze Age (Timberlake 1995), and lead has been mined here

sinc

STATUS: COMMUNITY: Pontarfynach

PRN: 115682 TYPE: TRACKWAY PERIOD: POST MEDIEVAL NGR: SN81607430

SITE NAME: Llechwedd Ty Mawr

SUMMARY: Earthworks of well-worn trackway descending from Esgair Elan towards Ty Mawr on the floor of the Cwmystwyth valley.

Possibly a trackway or a sled way related to peat workings. Recorded during RCAHMW aerial reconnaissance in March

2003. JS from T Driver,

STATUS: COMMUNITY: Ysbyty Ystwyth

PRN: 116398 TYPE: COTTAGE PERIOD: POST MEDIEVAL NGR: SN8126474490

**SITE\_NAME**: CWM-DU

SUMMARY: A cottage with associated enclosures and outbuildings, marked on the 1st edition Ordnance Survey map of 1888.

STATUS: COMMUNITY: Eglwyscummin

### B) Scheduled Monuments (SMs)

NPRN: 115 SAM: CD145 TYPE: Lead Mine PERIOD: Post Medieval/Modern NGR: SN80647503

SITE\_NAME: Copa Hill/Cwmystwyth Lead, Copper and Zinc Mines

STATUS: Scheduled Monument COMMUNITY: Pontarfynach

PRN: 33025 SAM: CD172 TYPE: Bridge PERIOD: Post Medieval NGR: SN77477357

SITE\_NAME: Hafod: Chain Bridge and Gothick Arcade

STATUS: Scheduled Monument COMMUNITY: Ysbyty Ystwyth

### C) Listed Buildings (LBs)

LB No: 83415 TYPE: Cottage PERIOD: Post Medieval

SITE\_NAME: Nantycae

LOCATION: Situated on E side of forestry block S of Ystwyth, approached past Hafod mansion site over Pont Dologau, some 500m SE of

Dologau. Grade: II

LB No: 84,249 TYPE: Cottage PERIOD: Post Medieval

SITE\_NAME: Briwnant Cottage and attached cottage

LOCATION: On the N side of the B4574 in Cwmystwyth village some 100m NW of Pentre Farm. Grade: II

LB No: 84254 TYPE: Cottage PERIOD: Post Medieval

SITE\_NAME: Gate Cottage

LOCATION: On the W side of Cwmystwyth village on the N side of the B4574 opposite Hafod Lodge. Grade: II

LB No: 84255 TYPE: Cottage PERIOD: Post Medieval

SITE NAME:Gatepiers and gates at Hafod Lodge

LOCATION: Just S of Hafod Lodge on the W side of Cwmystwyth village. Grade: II

LB No: 84256 TYPE: Cottage PERIOD: Post Medieval

SITE\_NAME: Hafod Lodge

LOCATION: On the W side of Cwmystwyth village on the S side of the B4574. Grade: II

### **APPENDIX IV:**

**Cambrian Mines Trust** 'Wish List'

## INITIAL DRAFT OF DOCUMENT REGARDING THE CAMBRIAN MINES TRUST WISH LIST FOR CIRCULATION TO LOCAL COMMUNITY GROUPS WHO HAVE EXPRESSED AN INTEREST

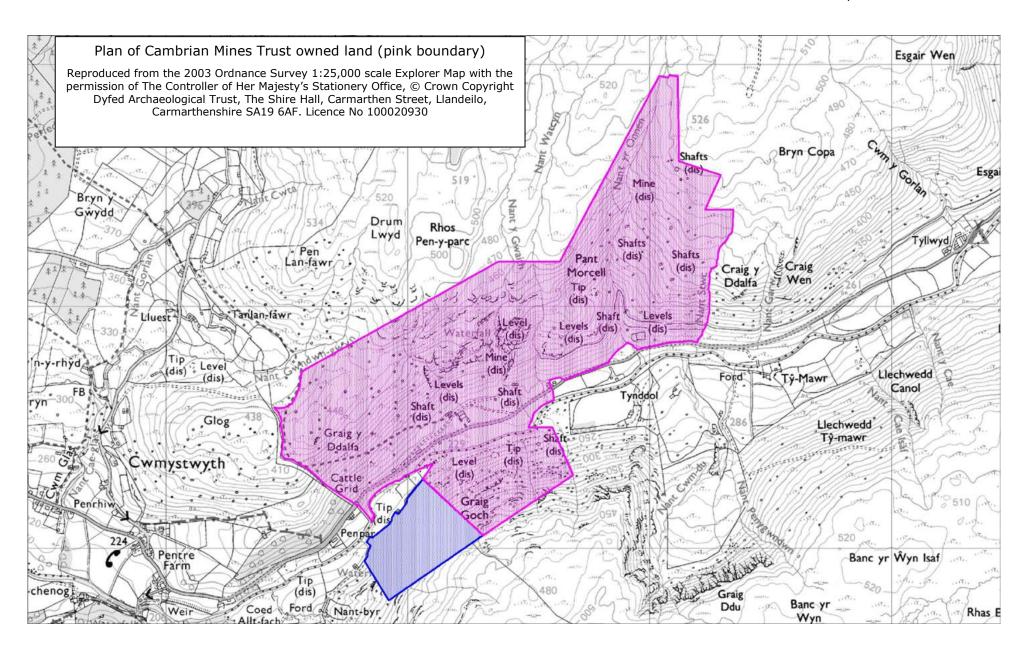
#### Introduction

The following items provide brief summaries of the Cambrian Mines Trust aspirations for future works at the Cwmystwyth Mines site. The aims of the work and a brief summary of the resultant benefits are also highlighted.

The majority of the works will require relevant consents and permissions from Natural Resources Wales, Ceredigion County Council and Cadw. The site area is covered in whole or in part by the Elenydd Special Area of Conservation (SAC), the Elenydd – Mallaen Special Protected Area (SPA), the Elenydd Site of Special Scientific Interest (SSSI) and the Mwyngloddfa Cwmystwyth SSSI. Parts of the mines site are also a Scheduled Ancient Monument. These designations mean that there is a responsibility of The Cambrian Mines Trust to ensure that any future works it undertakes obtain the correct permissions and consents, and also that visitors are informed of the relevant legislation and regulations. These requirements and regulations are discussed in more detail in the Management and Protection Plan for the Cwmystwyth Mines site.

The inclusion of items within the following list does not mean that they have been agreed or approved by the government agencies, but the items have been discussed with them. Approval of any consents or permissions will still need to be sought and it is possible that some items may be refused. The Cambrian Mines Trust will ensure that conditions on any forthcoming consents or permissions will be adhered to in the fulfilling of any of the following approved tasks. Where items of the wish list would affect land in other ownership, landowners permission would of course be sought before any works are undertaken.

It is intended that this document will be circulated to local groups and members of the local community in order that they can learn more about the aspirations of the Trust for the site and comment on the proposals. A number of local farmers have grazing rights across the Cwmystwyth Mines site and these aspirations will also be discussed with them. The Cambrian Mines Trust would welcome any concerns or support for any of the items on the list of aspirations for the site.



### ASPIRATIONS OF THE CAMBRIAN MINES TRUST FOR FUTURE WORKS AT THE CWMYSTWYTH MINES SITE

### ITEM 1: Signage to indicate ownership

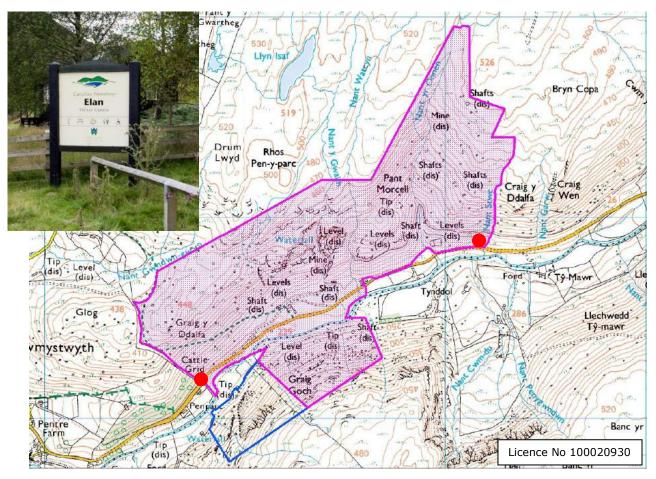
A sign to be located at either end of the site on the B4574, located at least 1m away from the carriageway.

The sign will say 'Cambrian Mines Trust. Welcome to Cwmystwyth Mines' in Welsh (top) and English.

The sign could be of similar size and design to the Elan Valley signage which is used at the entrance points to the Elan Valley and the same design used for the visitor centre (see below).

**Aims:** To inform visitors that the site is a former mining area. To demonstrate that the site is owned and managed. To provide basic information on the site extent and who owns the land.

**Benefits:** By showing that the site is owned and managed may reduce the amount of unauthorised and inappropriate use of the site (off-roading, materials removal, fly tipping). Educates visitors as to what the site area was.



Example of Elan Valley signage and plan showing approximate location of signage (red circles) at the edges of Cambrian Mines Trust owned land (pink boundary)

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### ITEM 2: Improved interpretation panels and signage

Design of new information panels for the site.

Relocation of the interpretation board at Nantwatcyn to the mill area. Replacement of that panel with one describing the South Cwmystwyth Mines (with consent of the land owner).

Design of the signage will include information on the archaeology, geology and ecology of the site and its significance.

A guide for visitors would also be included regarding safe access to the site, no overnight parking, no removal of materials, no off-roading etc. Additional more permanent signage warning of dangers within adit entrances or around unsafe structures or potential falls into open stopes or shafts would also be erected.

Information panels to be located at various locations to include the mill area (main information on the lead mines site, geology and ecology), Nantwatcyn (South Cwmystwyth Mines Area) and at the foot of Copa Hill adjacent to the car park at Nant Yr Onnen (Bronze Age and later mining).

Additional information leaflets regarding the site may also be designed and made available at surrounding visitor sites and possibly within the Nantwatcyn Pottery (subject to agreement with Duncan and Karen Browning).

**Aims:** To provide information to visitors on the site history and its significance. Provide information that the area is protected, being a SAM, SAC, SPA and two SSSIs, and inform visitors regarding safe and permissible access to the site.

**Benefits:** Educate visitors. Information on regulations about what can and can't be done at the site. Inform public on site dangers to prevent accidents.



Photo showing mill area of mines and possible location for information panels along front wall (shown as an example of what they could look like)

### ITEM 3: Improvement of the area adjacent to the B4574 to the south of the mill

#### Item 3A: Managing the stream course

Construction of a stream culvert to prevent ongoing erosion of archaeology and buildings in the area directly north of the road.

The stream course is also eroding a fines dump to the north of the road, which was formerly protected by a dry stone wall. It is also eroding the slimes spoil tip to the south of the road which is a major source of contaminants into the river.

Re-routing part of the stream outflow into the former Mill Tailrace, following archaeological investigation to confirm its route on the northern side of the road.

Dry stone revetment walls adjacent to eroding fines and slimes dumps could be constructed to mitigate against further erosion of these sources of contamination into the River Ystwyth.

**Aims:** To direct and manage the flow of the stream course which is presently a wide and irregular channel which changes with heavy rain fall and prevent further erosion and pollution. Improve accessibility into the site area.

**Benefits:** Prevent further undermining of the surviving walls of the fines store south of the mill building. Prevent further erosion of unidentified archaeological remains which are being eroded within the stream course. Prevent further erosion of the slimes dump on the southern side of the road which is directly polluting the River Ystwyth.



Photo showing current unmanaged stream course with eroding archaeology visible in the form of a wall



Photo showing eroding slimes dump south of the road

### Item 3B: Managing access to the mill area of the site

Construction of a dedicated pathway on the northern side of the B4574 to direct pedestrians from the parking area to the south of the road up to the mill area.

The proposed route would run along the eastern edge of the former stores building that lies to the south of the mill.

**Aims:** Management of access for the general public within the site, directing them to the mill area and the interpretation boards.

**Benefits:** Reduce erosion of ecologically sensitive spoil heaps and archaeologically sensitive remains.



Photo showing possible location of footpath (suggested line marked)

#### ITEM 4: Improved Car Parking across the site area

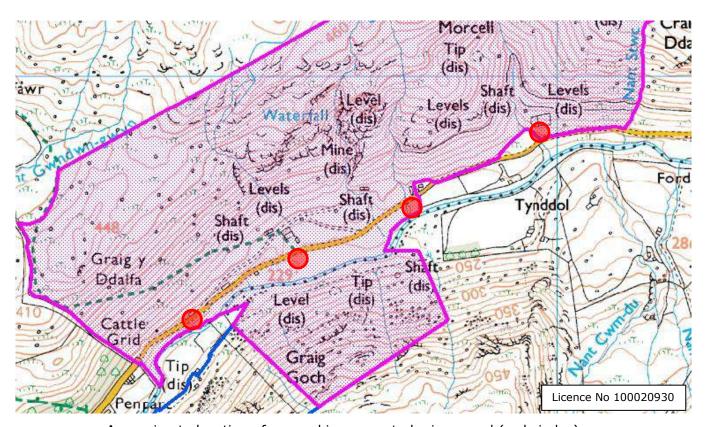
This would include improvements to the car parking area opposite the mill site, where modern fly tipped rubble heaps could be levelled to create a larger car parking area whilst maintaining the required farm turning circle.

Areas where parking or vehicle access is not allowed to be defined by the strategic placing of larger boulders (of local stone) which would also deter off-roading.

Re-grading of the sloping car park at Nant Yr Onnen – the level of which seems to have been made up and expanded fairly recently for council use when the existing road bridge was rebuilt.

**Aims:** Improving accessibility to the site for the general public and provision of better parking. Improve the managed appearance of the site.

**Benefits:** Increase the visitor numbers for the site and thus enable more people to learn about the significance of the heritage, ecology and geology of the site. Removal of unsightly modern fly tipped rubble dumps. Reduce parking on ecologically or archaeologically sensitive areas of the site. Prevent off road vehicles.



Approximate location of car parking areas to be improved (red circles)

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### ITEM 5: Re-opening of the original track to the mine yard

The present track way entrance is located adjacent to Nevill Place and has been blocked off with dumps of stone to prevent unauthorised access. It is proposed that these are removed and a gated entrance constructed.

Boulders would also be strategically to prevent off-road access.

**Aims:** Construction of new gated access to the track way that leads to the mine yard. All farmers with grazing rights to the land would have means of opening the gate.

**Benefits:** Improve the appearance of the mine track way entrance. Deter unauthorised vehicles from accessing the site area. Improve accessibility for local farmers and also for any vehicles required on the site for future works associated with the Trust (if needed).



Photo showing the original track to the mine yard

### ITEM 6: Restoration of the portal to Level Fawr and improvement of underground access

The present portal to Level Fawr is suffering from degradation. The original plaque and the subsequent replica have been removed from the site. It is intended that the portal will be restored and a new plaque erected.

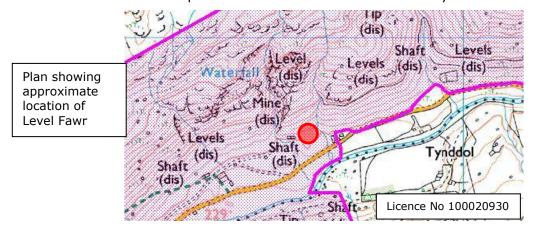
As part of these works improvements to the underground access would be undertaken to facilitate authorised access for longer term essential underground maintenance and remediation work on the historic remains, as well as enabling future recording projects.

**Aims:** To restore the portal entrance and erect a replica plaque above the entrance. Facilitate materials and equipment being able to be taken into the mine.

**Benefits:** Improvement to the outward appearance of Level Fawr, perhaps the best known of the adit entrances into the mine. Enable longer term maintenance and remediation projects of the ever deteriorating below ground remains in the mine. Enable the implementation of programmes of recording work both for the archaeology and ecology of the below ground site.



The portal entrance to Level Fawr February 2014



### ITEM 7: Restoration and improvement to the packwall entranceway and portal to Taylor's Level

Removal of the existing metal grill barrier which is fixed to the exterior of the portal and restoration of the dry stone walling around the packwall entrance leading from Nant Yr Onnen.

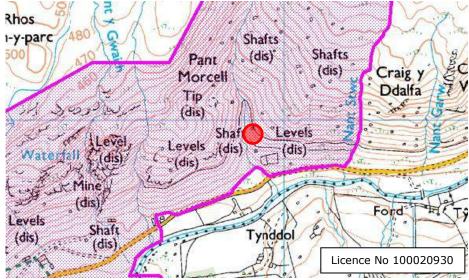
A new gateway would be constructed hidden within the entrance to the level, preventing unauthorised access.

**Aims:** To improve the outward appearance of this adit level by removing the existing inappropriately placed grill.

**Benefits:** Outward appearance of Taylor's Level is improved and the dry stone walls consolidated for the future.



Taylor's Level from western side of Nant Yr Onnen valley



Plan showing approximate location of Taylor's Level



Existing inappropriately placed barrier to Taylor's Level



Dry stone packwall entrance to Taylor's Level

### ITEM 8: Working with Natural Resources Wales for any future water treatment works at the site

Natural Resources Wales have identified Cwmystwyth as a major source of pollution into the River Ystwyth. The water draining from Pugh's Level at the eastern end of the site is one of the main sources of pollution. NRW are looking into the possibilities of a water treatment works to remediate the pollution from Pugh's Level and possibly the nearby Kingside Level, although the available land downstream of the adit may not be large enough for a suitable water treatment works.

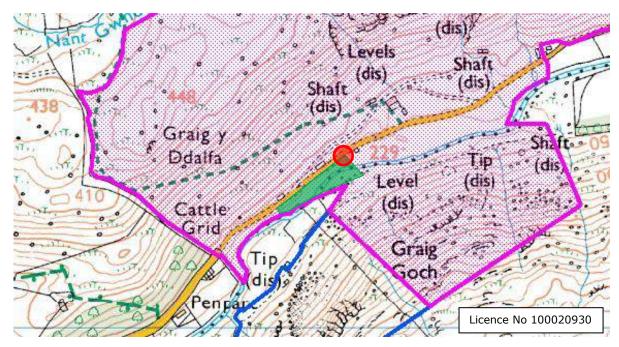
The Cambrian Mines Trust will work with NRW to ascertain if a workable solution can be achieved and grant them landowner permission to build such a works at the site. The Trust will also work with NRW to ensure that any future schemes would not compromise any proposed or completed site improvement works implemented by the Trust.

**Aims:** To work with NRW to allow them to build a water treatment works on Trust land to reduce pollution flowing into the River Ystwyth. Public access to the area would be maintained after its completion and educationally appropriate signage erected.

**Benefits:** Reduced pollution.



Water draining from Pugh's Level (iron oxide causing the red colouration)



Location of Pugh's Level entrance (red circle) and potential NRW water treatment area (green)

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### ITEM 9: Rebuilding of Neville Place and Staff House

Longer term projects could include the rebuilding of Nevill Place and Staff House into residential properties or accommodation for visitors to the site.

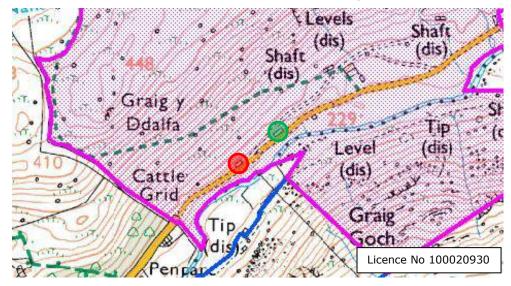
The item is very much in the early stages of discussion. It is probable that planning legislation may mean the scheme would not be granted planning permission. Both properties are presently in unsightly and possibly dangerous states and clean up or stabilisation of the remains should be considered if rebuilding is not permitted.

**Aims:** To provide an investment and possible income source for the Trust. To prevent further collapse and degradation of the buildings.

**Benefits:** Have increased occupation at the mine site to assist with management and monitoring.



The remains of Neville Place February 2014



Location plan of Neville Place (red) and Staff House (green)

### ITEM 10: Hydro-Electric Scheme

A private company has expressed an interest in the site area for the construction of a hydro-electric scheme. The scheme would follow the line of the former hydro-power scheme that was used by the lead mine to power the mill works.

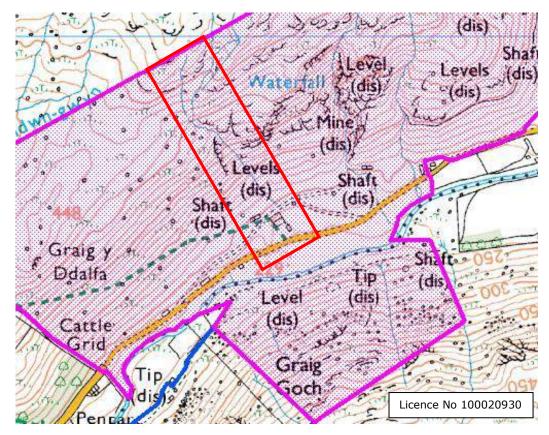
The scheme has been discussed with NRW and Cadw and is generally looked on more favourably than a previous scheme suggested for the site. Ecological and archaeological issues have been considered in the outline design scheme. The hydroscheme should not impact on the water flow of Nant Y Gwaith nor from Nant Watcyn.

Water management works and improved access suggested in Item 3A and 3B would be undertaken in anticipation of this scheme and potentially funded by it. Works would not be undertaken which would be negated by the hydro-electric scheme development.

**Aims:** Construction of a hydro-electric scheme by a private company with permission given by Cambrian Mines Trust.

**Benefits:** Efficient and renewable energy source which could benefit the local area. Ground rent income for the Cambrian Mines Trust. The development could fund the stream culverting and footpath into the main site area.

Below is information available on The Cambrian Mines Trust website



Plan showing approximate are of the hydro-electric scheme proposal

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View from the mill tailrace with the stream course running up the centre of the hillside, the route of the former water power pipeline can be seen to the left of the stream course

Information supplied by Cambrian Mines Trust – http://www.iriscom.co.uk/CMT/Hyro%20proposal2.pdf

### (V2) CAMBRIAN MINES TRUST

### A description of the Cwmystwyth Mine high pressure water system and proposed partial reinstatement for generation of electricity.

#### History

In 1898 the mines were acquired by the Cwmystwyth Mining Company Ltd who were quick to embrace new technology. This included the erection of a new processing mill on the site of the previous mill and replacement of the existing system of waterwheels with a new high pressure water system driving turbines.

A high pressure pipeline coming down from near Nant y Graig gave a head of 190 feet to drive an 120 hp Gilkes Vortex turbine to operate the machinery in the new mill, while a branch from it drove a small 15 hp Pelton turbine situated in the then defunct mine crusher house.

A second high pressure pipeline came down roughly parallel and to the west of Nant Trefach and drove a 5 ft diameter 168 hp Pelton turbine mounted just above the mill with about 780 ft head of water. This operated 2 identical Schram compressors as well as an incline winder used to raise ore trucks from Lefel y Ffordd at road level to the level of the mill hoppers. There was also a clutch system which could engage drive wheels to operate the mill by means of a wire rope loop system.

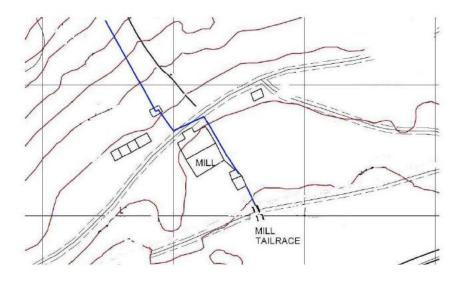
The waste water from the turbine was then carried down a pipe mounted on the plinths below the turbine mounting that are still in existence to an 'L' bend at the lower plinth. The pipeline was then conducted aerially into the mill building to supply the dressing machinery.

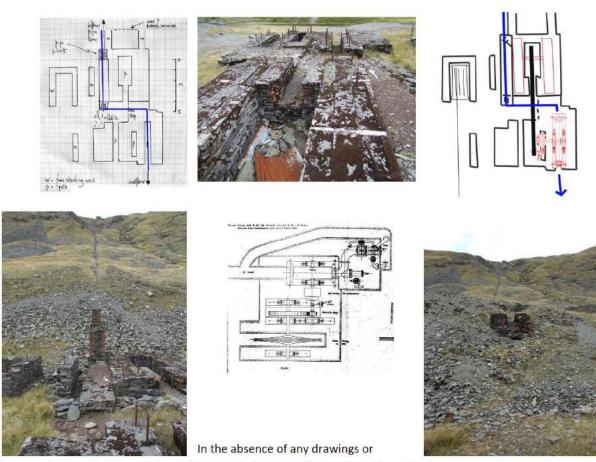
### Proposal

The proposal is the reinstatement of the Nant Trefach pipeline down to the concrete compressor beds and then from there above ground following the route of the original waste pipe that supplied the mill dressing machinery. This should be visually in character with the original pipeline and mounted on the original plinths. As the mill building no longer exists the pipeline should go below ground as near as possible after the lower support plinth. At a later stage a replica Pelton turbine cover can be fabricated and installed over the original placement on the concrete foundations.

Below ground the pipeline can be buried under a new visitor footpath which will form a reinforced western bank for the Nant Trefach stream so as to prevent erosion by floodwater in times of heavy rain. It is proposed that the new generating station be built within the walls of the mine concentrates store, which is the small building nearest the road. Waste water from the generating turbines can then be ducted into a reopened mill spillway culvert under the road. This can also carry the power line through ducting if permitted. From here the cabling would be carried aerially across the river to join the grid by wooden poles but the first not too close to the road /parking area.

The reopened mill culvert will be able to carry floodwater which normally spills over the road and freezes in cold weather.





photographs etc and due to the complexity of gearing etc it is not possible to accurately represent the arrangement, however the exact position of the turbine and compressors can be accurately ascertained by simple logic. Above original drawing shows a 'typical' application.

### ITEM 11: Establishment of a 'Mid Wales Mining Trail'

Working with other mine sites and attractions, such as those at Llywernog Mining Museum at Pont Erwyd or Devil's Bridge developing a trail across the mid-Wales ore field for visitors to learn more about the metal mining industry of the area and its extent. The trail could include hiking routes or driving routes, as well as shuttle buses between sites (in a similar fashion to the Pembrokeshire coast shuttle buses).

**Aims:** To improve access to metal mining sites and education of visitors to the region and local communities.

**Benefits:** Increased knowledge of the mining heritage, ecology and geology of the region. Increased visitor numbers and thus economical benefits for local communities and the region.

# **APPENDIX V: Archive Cover Sheet**

### **ARCHIVE COVER SHEET**

### Cwmystwyth Lead Mine, Cwmystwyth, Ceredigion

### ARCHIVE DESTINATION - RCAHMW

Site Name:	Cwmystwyth Lead Mine, Cwmystwyth, Ceredigion
Site Code:	CLM/2019/FS
PRN:	5461
NPRN:	115
SAM No.	
Other Ref No.	HRSW Rpt No. 207
NGR:	SN 8038 7465
Site Type:	Metal Mine.
Project Type:	Heritage & Archaeological Feasibility Study
Project Manager:	Richard Scott Jones
Project Date(s):	March 2109
Categories Present:	None
Location of Original Archive:	HRSW
Location of Duplicate Archive:	RCAHMW
Number of Find Boxes:	N/A
Location of Finds:	N/A
Museum Ref:	N/A
Copyright:	HRS Wales

None

**Restrictions to Access:** 



Egwyl, Llwyn-y-groes, Tregaron, Ceredigion SY25 6QE Tel: 01570 493759 Fax: 08712 428171 E-mail: richard@hrswales.co.uk