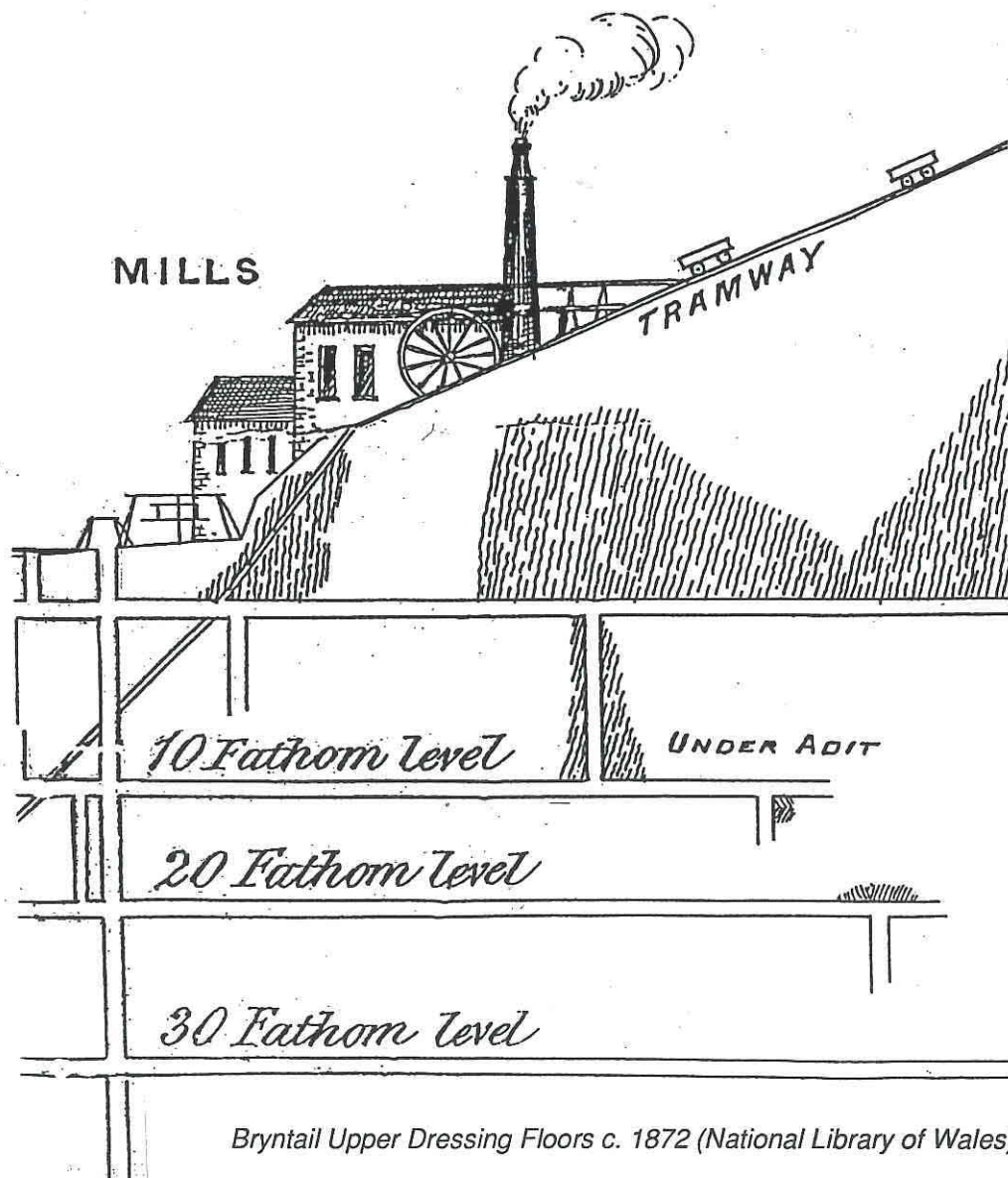


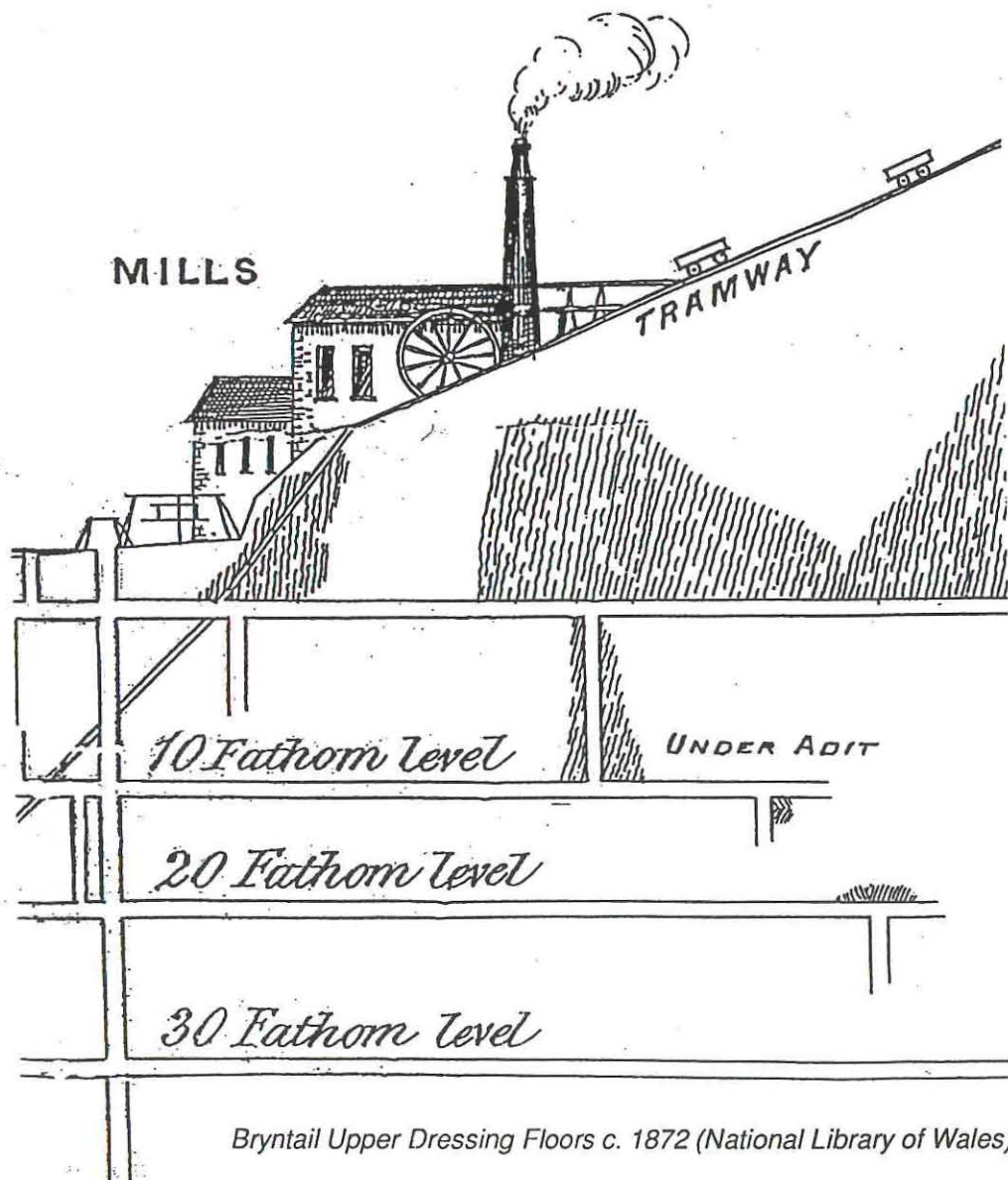
CONSULTATION DRAFT  
*Powys Metal Mines Survey 1993*



*Bryntail Upper Dressing Floors c. 1872 (National Library of Wales)*

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**CPAT Report No 89**

**CONSULTATION DRAFT**  
*Powys Metal Mines Survey 1993*

**by M Walters**  
January 1994

Survey undertaken with financial assistance from  
Powys County Council

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## PART 1 INTRODUCTION

### 1 BACKGROUND

- 1.1 The most extensive industrial landscapes in Powys are related to non-ferrous metal mining, in particular the extraction of lead, zinc and copper ores in the west of the county. A great deal of research into the historical aspects of the development of metal mines in Powys has been published, most notably the series of books on *The Old Metal Mines of Mid Wales* by David Bick. Study of the surviving physical remains of these industries have been much more limited: no detailed surveys of surface remains or underground remains (with the exception of Llanymynech) have been completed. Only limited excavation has taken place, at Nant Yr Eira in 1937 and 1988 and at Van in 1992/3, and no site-specific or county wide research frameworks have been proposed. The limited scale of the work that has been undertaken is more a reflection of the infancy of mining archaeological studies and of the small number of specialists in this field than of the inherent importance of the remains themselves.
- 1.2 The present study, based upon rapid fieldwork and recording, is intended to provide a summary of the surviving physical evidence of non-ferrous metal mines in Powys rather than a definitive history or interpretation of the industry that these remains represent.
- 1.3 Following the publication of *Planning and Policy Guidance Note: Archaeology & Planning* (PPG16) by the Welsh Office in November 1991 greater emphasis has been placed on the role of planning authorities in the conservation of archaeological remains through the planning process and a framework has been provided for the construction of appropriate mitigation measures depending on the size and nature of the planning threat to the archaeology.
- 1.4 The archaeological potential of mining sites in Powys has previously been little studied, and little appreciation has been possible of the extent or nature of the surviving archaeological resource relating to these sites. As a consequence, poor consultation and liaison between planners and archaeologists concerning early mining sites has in some cases led to the total destruction of mine sites with little or no archaeological recording.
- 1.5 The Clwyd-Powys Archaeological Trust (CPAT) has therefore taken a lead in carrying out a study of the Powys mines which includes all non-ferrous metal mines and some of the less archaeologically sensitive abortive coal/ore trials and phosphate mines. It is intended that coal mining remains in southern Powys will be covered by a future thematic report in the same format. Financial support has been provided by Powys County Council and the Clwyd-Powys Archaeological Trust.
- 1.6 Until recently, advice on the implications of proposed developments affecting mining sites has often only been sought from reclamation consultants and industrial archaeology historians. Specialist advice of this kind continues to be of importance, but following the publication of PPG16 it is recommended that the advice of CPAT, the principal advisory body on archaeological matters in the counties of Clwyd and Powys, should now be sought as a matter of course, as in the case of other development proposals with archaeological implications.



## **Acknowledgements**

- 1.7 I would like to thank the following for their help and support during the survey and production of this report: Powys County Council for funding of the survey and report production costs; Chris Musson of the Royal Commission on Ancient and Historical Monuments in Wales for his aerial photographic work; colleagues within the Clwyd-Powys Archaeological Trust, particularly Bill Britnell, Chris Martin and Pat Frost for their general support of the project and providing advice on content and layout; David Bick for visiting sites with me and interpreting some of the more difficult structures; staff of the National Library of Wales, Welshpool Library and Ruthin Record Office for the supply of maps and documents; Mid-Wales Caving Club for help in carrying out a number of sub-surface surveys in Montgomeryshire; Simon Hughes for random injections of useful information, particularly about Van Mine.

## **2 OBJECTIVES OF THE STUDY**

- 2.1 The main objectives of the study have been as follows:

- To produce an overall survey of the surviving archaeological resource at every identifiable non-ferrous metal and phosphate mining site in Powys
  - To identify archaeologically sensitive areas in and around each mining site in order to assist in the day-to-day planning process and future planning strategies at district and county level
  - To recommend where archaeological work should be carried out at the pre-determination stage of the planning process
  - To propose instances where mining sites, landscapes or structures are sufficiently important to warrant continued preservation, conservation and management
- 2.2 It is hoped that this document will be used in conjunction with other planning policy documents and planning development control procedures as a day-to-day reference and for use in strategic planning.

## **3 METHODS OF STUDY**

- 3.1 The greatest proportion of the time taken on this survey was devoted to field assessment of every identifiable mine and most of the more significant trial workings. Rapid identifications were carried out on site of all the surviving features backed up by a 35mm black & white and colour slide photographic record of all of the main features of each mine, and of the general mining landscape.
- 3.2 In the field notes were taken of the character and state of preservation of mining features together with identification of potential threats to the mine site. Where available, copies of the 1st and 2nd edition OS maps were annotated in the field while sketch plans were drawn up where maps were not available.



- 3.3 The fieldwork survey undertaken by CPAT has been carried out in conjunction with aerial reconnaissance undertaken by Chris Musson of the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW), Aberystwyth.
- 3.4 The project archive which has been retained by CPAT consists of field notes, annotated maps, ground-level photographs and prints from RCAHMW's aerial surveys. The original aerial photographic material has been retained by RCAHMW.
- 3.5 Documentary research has been limited to the main secondary sources of information, including the Powys Archaeological Record (the County Sites and Monuments Record maintained by CPAT). Primary sources of information have been largely restricted to published Ordnance Survey maps and a number of other documents including the following: maps, mine plans and documents held by the National Library of Wales; maps, mine plans, leases and prospectuses held by the Clwyd Record Office at Ruthin; various articles published in The Montgomeryshire Collections.
- 3.6 Research and fieldwork data have been collated by means of a relational database compatible with the Regional Sites and Monuments Record held by CPAT.

#### **4 THREATS TO MINING SITES IN POWYS**

- 4.1 Due to the inaccessibility of many of the mining sites in Powys, practically none of the sites until recently have been affected by large-scale planning-related developments. The most widespread damage that has occurred to the surviving physical remains has resulted from natural deterioration of the disused structures combined with local robbing for stonework and tipping of domestic and farming refuse. The other principal threats identified during the survey are listed below.

##### **Agricultural**

- 4.2 Small-scale agricultural development for trackways, agricultural buildings or retirement dwellings potentially present a significant threat to mining sites, particularly in more upland areas. The dressing floors at Cafarthfa Mine, for instance, were extensively damaged by the erection of agricultural barns and sheep pens.

##### **Forestry**

- 4.3 Forestry Commission planting schemes after 1945 covered extensive areas of mining landscape in the west of the county. In many instances damage has been caused by preparatory ploughing of new plantations and by subsequent root growth displacing standing wall fabric, as for example at Ceulan, Brynffedwen and Fedw. It is anticipated that problems of this kind will be overcome in future by improved liaison between archaeological bodies and the newly-formed Forestry Enterprise and Forestry Authority, a growing awareness of the importance of industrial archaeology and the tourist potential of mine sites. In western Montgomeryshire, for example, recent thinning and felling programmes have recently incorporated the removal of tree and shrub cover from a number of sites including parts of Nant Yr Eira, Ceulan and Rhoswydol. Repair and



restoration programmes have been put forward in consultation with the Welsh Mines Society and Welsh Mines Preservation Trust.

### **Shaft Capping**

- 4.4 Shaft backfilling, capping and gating of levels are also a potentially major threat. Although no such work has been carried out in Powys the demand for safety measures is high, particularly from the farming community. Shaft capping and related works often necessitate the use of heavy plant machinery to excavate around the shaft collar in order to locate solid ground on which to lay the cap base. This can result in extensive damage to vulnerable surrounding features such as bob pits, whim circles, wheelpits and engine house remains. Shafts are frequently backfilled with demolished surface buildings and machinery (eg headgear, shear legs, pumping rods and piping, and engine house remains) at the time of closure or demolition of the mine. As a general rule, the maintenance of access to mine workings by means of restricted access gateways is preferable to total backfilling and inaccessible capping. Besides destroying important archaeological information the latter can also seriously damage rare, and frequently protected, wildlife habitats.

### **Quarrying/Mining**

- 4.5 Quarrying of rock on previous mining sites is threatening the Llangynog and Craig Rhiwarth mines. Interim Development Orders (IDOs) were renewed for both these quarries in April 1992 but no further determination of conditions applications have so far been received due to a lack of quarrying activity at these locations. It has proved difficult to attach archaeological conditions to these applications and any recommendations subsequently made after an assessment is completed cannot restrict the economic viability of the workings. The potential for mitigation of serious disturbance to mine sites in quarrying areas is therefore seriously hindered from the outset. Detailed assessments, including extensive trial excavations are recommended for these two particular sites should applications be received.
- 4.6 None of the abandoned metal mines in the county are currently economically viable: reserves of zinc are believed to be high but profit margins would be small due to cheaper foreign imports; lead reserves are believed to still exist at depth, especially on the Van lode, but the costs of prospecting and extraction are considered too high for development to proceed. Although there have been no attempts to re-work metal mines in recent years renewed extraction would undoubtedly pose a serious threat to surviving archaeological remains. Applications for re-newed extraction should therefore be subject to the consultation procedures outlined in PPG 16.

### **Reclamation Schemes**

- 4.7 Large-scale reclamation schemes undertaken by local authorities with grant aid from the Welsh Development Agency (WDA) undoubtedly pose the single greatest threat to mining sites, particularly where derelict buildings and landscapes and the threat of chemical contamination are concerned.
- 4.8 There is often considerable scope for preservation and display of industrial remains as part of a reclamation scheme, and it is to be welcomed that the WDA have a stated preference for schemes that make provision for the retention of surviving features of the industrial landscape.



- 4.9 For this to be achieved, however, it is vital that archaeological consultation is undertaken at a very early stage, adopting the procedures outlined in PPG16.
- 4.10 The mines at Van, Dylife and Llangynog are currently affected by schemes of this kind. The scheme affecting Van is currently in progress (October 1993). Two stages of archaeological investigation have been undertaken which have located a number of important features worthy of preservation. Archaeological evaluation should similarly be undertaken at Dylife and Llangynog as soon as possible so that mitigation proposals can be included within the reclamation specifications.

## **5 RECOMMENDED ARCHAEOLOGICAL CONSULTATION PROCEDURES**

- 5.1 Since few of the mining sites in Powys have been excavated or surveyed in detail, existing records are seldom complete and there is often a degree of uncertainty, as in the case of other archaeological remains, about what evidence might survive at any particular site and about the quality of preserved evidence. The archaeological implications of any scheme can only be judged if adequate information about the archaeology is available, and even though many reclamation schemes that effect mining sites are not subject to planning permission, it is strongly recommended that in order to maximise that available information the archaeological consultation procedures outlined in PPG16 are used as a model when preparing such schemes, as they would be in all cases where planning permission is required. These procedures highlight the need for assessing and evaluating the archaeological resource at a pre-determination, or equivalent early, stage of a development proposal, thus enabling suitable mitigatory measures (including preservation of extant features, survey and recording and if necessary excavation) to form an integral part of the proposal. Early consultation, after the manner of PPG16, will allow appropriate design briefs to be prepared, for reclamation schemes or other development proposals effecting mine sites, and properly integrate any necessary archaeological components with the scheme. The identification of potential additional costs, arising from archaeological conservation is particularly important at this early stage. The staged approach outlined in PPG 16 may be summarised as follows.

### **Consultation**

- 5.2 Prospective developers of mining sites, and those promoting reclamation scheme, should seek consultation to identify the archaeological implications of their proposals. Preferably this should be done at as early a stage as possible in the design of reclamation works, and certainly before a planning permission is sought. It is often too late to take proper account of the industrial heritage if consultation only comes in response to a planning application, or after a detailed development brief has been prepared.

### **Consultees**

- 5.3 The Curatorial Section of CPAT is the principal body in Clwyd and Powys providing advice on a broad range of archaeological matters to planning authorities and developers, and can be consulted directly about schemes effecting mining sites. On receipt of such consultation, specialist advice is



sought by staff of the Curatorial Section from bodies such as Cadw, RCAHMW, the Welsh Mines Society and the Welsh Mines Preservation Trust as appropriate. CPAT's Curatorial staff will normally provide an appraisal of existing information and will indicate the desirability of any further work, in accordance with the guidelines in The Welsh Archaeological Trusts' Curators' Code of Practice. Copies of this document are available from CPAT.

### **Initial responses**

- 5.4 The initial response by CPAT to consultation will usually take the form of a written appraisal of existing information (from the SMR and other readily available sources). As the existing record is often inadequate, it is possible that initial responses will also include recommendations that more detailed archaeological assessment and evaluation should be carried out, as recommended in PPG16, designed to locate and record visible surviving features and to assess their state of preservation, function and overall importance. This might usually be achieved by a combination of documentary research, selective small-scale trial excavation and field survey, which will be outlined in a written brief .

### **Archaeological contractors**

- 5.5 It will normally be appropriate for a public or private developer to engage the services of a professional archaeological contractor to undertake any archaeological work prescribed by CPAT.

### **Mitigation strategies**

- 5.6 The primary aim of consultation, and the appraisal, assessment and evaluation of archaeological information that it entails, should be the production of a positive strategy to mitigate the effects of the reclamation scheme, or development, on the archaeological resource. Mitigation strategies should be designed (normally the archaeological contractor within a framework supplied by the developer) to ensure the continued preservation in-situ of significant remains, or to ensure that remains are adequately recorded in advance of destruction where this continued preservation is not feasible, and should be presented as part of any overall project design. A typical strategy might suggest, the exclusion of certain areas or structures from the development proposals (preservation in-situ), and perhaps more extensive archaeological recording and excavation (preservation by record), and will almost invariably recommend a watching brief over a broader area of a site during earthmoving operations. In some instances it will also be appropriate to include recommendations for the conservation and display of preserved archaeological remains as part of a scheme.

## **6 SUMMARY OF THE HISTORY OF MINING IN POWYS**

### **Prehistoric mining**

- 6.1 Evidence for prehistoric mining activity was first recognised in the early to mid nineteenth century when re-working of long-abandoned mining sites during the main expansion of the lead mining industry in Wales brought to light stone tools and, less frequently, metal and bone tools. The re-working of Llanymynech Ogof in 1823, Machynlleth Park in 1856, Newtown in 1856, Nantyreira in 1859, and



Nantyrickett all produced evidence for early mining which was invariably taken to be evidence of Roman activity in contemporary mining and antiquarian reports.

- 6.2 The exploitation of ore sources during the prehistoric period is most frequently evidenced on dated sites by deep, linear opencasting from the surface where the vein material would have been most easily recognised, and often associated with evidence of firesetting. At depth, if drainage problems were not encountered, narrow galleries followed the vein material to its full extent. Such typical workings are visible at all of the early Powys sites and are characterised by highly efficient removal of the ore using working areas not much larger than the original orebody. Except for Llanymynech, stone tools have been found in stratified contexts as well as occurring as residual finds in later spoil tips. In all cases the metal sought was copper, most frequently in the form of copper sulphides (chalcopyrite). There has been some speculation as to whether argentiferous galena was mined in the late Bronze Age. When alloyed with copper and tin this gives a more malleable metal in the smithing process. No evidence of the mining of lead in the late Bronze Age has been identified to date.
- 6.3 The most detailed work has been undertaken at Nantyreira, starting with Oliver Davies' pioneering excavations in 1937, and by the more detailed examination undertaken by Simon Timberlake in 1988. Radiocarbon dating of wood samples recovered from spoil tips during the more recent excavations has produced Early Bronze Age dates, suggesting that the assemblage of early mining tools from the site are of comparable date to those which have been excavated more recently in Wales, most notably at Cwmystwyth (Dyfed) and Parys Mountain (Gwynedd).
- 6.4 The mines at Llanymynech Ogof and Llanymynech Hill have received relatively little attention despite being the first site in Wales with early mining evidence to be classed as a Scheduled Ancient Monument. Finds from the Ogof workings in particular provide evidence that the earliest mining activity took place before the second century AD, and recent rescue excavations close to the hillfort defences have produced evidence of metalworking debris dating to the first-second centuries BC. The surviving remains are potentially of international importance and some form of assessment of the earliest mine workings which lie buried, to great depth in places, by undated backfilled mining debris within the Ogof is desirable in order to provide a more coherent strategy for future management of the workings. The management of this site should be looked at, by Cadw, with some urgency.
- 6.5 Prehistoric workings are also suspected at Dylife and Siglenlas where early copper extraction is documented and there are workings characteristic of the period. Chronologically distinctive stone tools have not as yet been recorded at either site, but extensive later workings may have buried the earliest tips. Buried early tips have also been recognised close to Boundary Shaft on Pen Dylife.

#### **Roman mining**

- 6.6 Although it has often been assumed that Roman workings were limited to shallow surface extraction methods similar to those used in the prehistoric period, there is now good evidence from elsewhere in Europe that great advances in extractive technology were made during this period, with deep



shafts, long levels, and de-watering adits with power for pumping and winding aided by waterwheels. Processing techniques were not technologically superseded until the sixteenth century. The infrastructure of the industry was equally as well developed commercially with initial military exploitation being taken over by civilian companies or guilds in the later first century. We should therefore be looking for, and quite reasonably expect to find, a far more complex archaeological record than has been assumed to exist.

- 6.7 Although it has been claimed that a large number of mines in Powys are of Roman origin, the only certain evidence comes from Llanymynech Ogof. During the course of exploration and mapping in the 1960s, a coin hoard deposited in the second century AD was found concealed within a pile of stacked and calcited waste material in the Shaft Chamber. The waste must therefore have been deposited prior to this date and this section of the mine was clearly worked out by the second century. Numerous finds of human remains in the Mandible and Burial Chambers, together with pottery and metal finds of Roman date, suggest that the disused mine workings were used as a place of burial, probably from the second century onwards. The mine workings show at least three clear phases of extraction with narrow, sinuous galleries possibly of Iron Age date, later widened into squarer cut, and more deeply penetrating galleries which may be of first century Roman origin. Later phases of working are represented by a shaft cut in 1823 and subsequent minor extraction or trial workings close to the Shaft Chamber which are evidenced by shot holes in the rock face.
- 6.8 The ore reserves in west Montgomeryshire in particular would have been of considerable economic importance during the Roman period with large lead ore sources close to the surface in many locations, occasionally containing economically viable amounts of silver. It seems unlikely that these sources were ignored entirely and the lack of known sites in this region and Wales as a whole is possibly a reflection of the limited amount of research that has been undertaken on the Roman mining industry in Britain. The remoteness of many of the ore sources from major lines of communication and thus from production and distribution centres may have inhibited the development during the Roman period in this region however. Only the large group of mine workings at Dylife lie directly on a supposed Roman road, with a possible Roman signal station sited just above the oldest opencuts and shafts. In the case of other mines north and south of Llanidloes communication must have been very difficult and over inhospitable ground. Potentially large smelting centres seem to have been sited well to the east of the mines, slag concentrations in direct relationship with Roman finds being reported at Caersws, Trefeglwys and Llanfyllin. The cost of transportation of the ore to the smelters and manufacturers must have been a significant factor in profit margins. Some of the cost could have been reduced if lead was smelted at source but there is little evidence for this with undated slag heaps only being recorded at Dylife, Newtown, Cwmbychan, Llanymynech and Llangynog. Sadly at all of these sites the smelting locations have either been lost or destroyed.
- 6.9 It seems unlikely that all of the Roman workings have been destroyed by later workings. The Llanymynech Ogof Mine was probably totally exhausted by the time that eighteenth and nineteenth century miners were re-prospecting the hill. The early workings were soon abandoned as un-economic to work and as a result a number of intact and well preserved early workings are recorded and others undoubtedly



awaiting discovery. A number of plans and sections of Montgomeryshire mines show ground which had been previously worked out and frequently attributed to the 'Old Mens Workings'. Surface and underground survey of these locations is a priority since they are likely to have been rapidly abandoned as uneconomic and will therefore contain intact early mining archaeology. Mines with a potentially high priority for research into Roman activity in Powys include the following: Dylife/Pen Dylife, Dyfnwgwm, Craig Rhiwarth/Cwm Orog, Cwmbychan, Llanymynech, Newtown, Llandrindod, Tyisaf, Allt Y Main, Nantyricket, Siglenlas, Glaslyn, Clochnant, Craig y Mwyn and Cefn Pawl.

### **Medieval mining**

- 6.10 The same level of technological development in mining which had been attained by the late Roman period was used throughout the medieval period. The only technical improvement credited to this period is the use of the horse whim for winding and pumping. This development is believed to have originated on the continent, although doubts have been expressed about this assumption. The evidence of medieval mining in Powys is wholly from documentary evidence as no workings have yet been conclusively dated with stratified datable material.
- 6.11 In 1187 lead ore was being transported down the Severn from mines probably located on Llanymynech Hill, and in 1194 the Carreghwfa mine at Llanymynech was being re-worked supposedly to produce silver for the Shrewsbury mint. This activity ended before the end of 1195.
- 6.12 Unsubstantiated claims for medieval mining at Rhoswydol should be treated with caution although the oldest workings on the top of the hill may well date to this period, if not earlier. Medieval mining studies need to be encouraged in Wales generally. A thorough survey of documentary sources for mines in Powys during this period along with an intensive field survey on suspected sites are both urgently needed to supplement the almost total lack of information we have at present.
- 6.13 Medieval mining remains are suspected or recorded at Dylife (including Esgair Galed), Pen Dylife, Rhoswydol, Llanymynech, Craig Y Mwyn, Allt Y Main, Dyfnwgwm/Castle Rock, Gwestyn, Siglenlas, Llandrindod, Tyisaf, Clochnant, Nant Y Blaidd.

### **Post-medieval mining**

- 6.14 Rapid advances in mining technology at Welsh mines only become evident from the seventeenth century onwards. The creation of the Society of Mines Royal led to a brief expansion of the industry, particularly in Cardiganshire and West Montgomeryshire. Hugh Myddleton actively developed a number of previously abandoned mines between 1617 and 1631. He absorbed ideas from the continent and applied them to the Welsh terrain with limited success. His most influential technical advances included the use of deep shafts in conjunction with surface waterwheel driven pumping engines. The use of ventilation shafts, usually 80-100 metres apart, further improved underground conditions and increased the overall maximum depth attainable in mines up to that period. Myddleton successfully proved that Welsh ore sources were winnable from greater depths than previously attempted and discovered that the ore was frequently also enriched at depth.



- 6.15 In the first half of the seventeenth century Craig Y Mwyn, Dylife, Ceulan, Gwaith Y Mwyn and the unidentified 'Robindor' were all being worked by lessees. Subsequent to the death of Myddleton in 1631, Thomas Bushell became the chief lessee in 1636. Like Myddleton he was keen to develop new techniques and is most often quoted as being responsible for the revival in use of deep levels and inclined de-watering adits. The first adit is believed to have been driven in 1637-8 in Cardiganshire and deep adits were soon a commonplace feature elsewhere. Good ventilation in these deeper mines was essential and Bushell pioneered the use of bellows driven pumping engines feeding air through lead pipes placed in the floor of the adit.
- 6.16 Advances in the processing of the mined ore were slow and were only being developed on the larger mine sites where vastly increased quantities of ore reaching the surface had to be more efficiently reduced to concentrate for smelting. Water powered stamps mills were first used during Myddleton's time to break down the larger pieces of mixed ore and gangue and were the precursors of the later rolls crushers and rock breakers of the nineteenth century. They were water powered with the main drive supplied by a waterwheel operating a cam wheel which powered vertical crushing hammers that pounded the ore on stone anvils or mortars. No early stamps mills have been identified in Powys but remains are suspected at Dylife where multiple hollowed mortar stones have been found in Nant Dropyns (Esgair Galed).
- 6.17 Towards the end of the seventeenth century mining for lead was again in general decline. In 1678 the situation at Y Garreg Wen, Llanymynech was probably typical in being a newly developed working employing only two miners extracting lead towards the former Carreghwfa workings. In 1692 the rich veins at Llangynog were first discovered and rapidly developed. Llanymynech was again being worked in this same year and is believed to be the location of the first use of gunpowder in Welsh mining. At this time explosives were still very expensive and there was also a widespread distrust and fear of the technique by miners until the mid eighteenth century.

#### **Eighteenth century mining**

- 6.18 In 1698 a group of wealthy speculators set up the Company of Mine Adventurers under the joint governorship of William Waller and Humphrey Mackworth. This company developed a number of mines in Cardiganshire and West Montgomeryshire and was in existence for sixty years during which time most of the mines in this survey received some attention. The first thirty years of this century saw little activity in the county but from 1730 exploration was rapid and by the 1770s most of the West Montgomeryshire mines and some of the western Brecknockshire mines had been either extensively re-opened or newly developed.
- 6.19 Technology altered little in this century and despite the invention of the steam engine in the first half of the century the prohibitive costs of installation together with the subsequent fuelling costs meant that steam engines were not used on Powys mining sites before the 1850s. Winding was still powered by whim engines of small mines while most pumping and processing operations were driven by waterwheels.
- 6.20 Most of the main mineral veins in Powys had been worked at some point by the end of this century and exploration in the nineteenth century, which was to lead to some of the richest ore discoveries, concentrated on locating deep extensions



of the main lodes by cutting deeper shafts and levels.

### **Nineteenth century mining**

- 6.21 With the onset of the Industrial Revolution the development of new machinery aided by improved manufacturing techniques and an inventive renaissance completely revolutionised mining and processing methods.
- 6.22 Steam engines were first used in Powys during the 1850s at Dyfnwgwm and Abergwesyn. By the 1870s they were a common feature on the largest mines. Vertical Cornish engines were in use pumping the main engine shaft on a mine while smaller horizontal engines were put to many uses including winding, stamping and crushing. The cost of installation and the subsequent costs of fuel transport to the engine were the deciding factors in whether an engine was installed or not, but in general, water power remained supreme until the decline of the industry.
- 6.23 The dressing floors saw the most extensive alterations with all of the manual stages of processing slowly being completely mechanised throughout the century. Ore bins/wash kilns became common from the late eighteenth century onwards and they are present on every nineteenth century mine in Powys. The design changed little throughout the century with the bin consisting of a concave vertical wall setting down which the mined rock was tipped. A flow of water over the top of the bin washed the rock in the bin thus allowing the identification of ore and waste rock. The rock was then pulled through a small hatch onto a sieve plate in front of the bin and sorted for crushing. The preservation of these bins varies greatly; they were quickly constructed and are usually the first feature to disintegrate on the mine. The best examples in Powys can be seen at Nant Y Car South Mine and Cwm Orog.
- 6.24 The crusherhouse is first recorded in Wales in the 1820s and is still frequently the most impressive surviving building on the dressing floor. In Powys all of the larger mines had a crusher house by the 1850s. Crusher rolls reduced the mined ore and gangue to an even size. This material was then sorted in a set of jiggers, platforms and shed foundations for which are a common archaeological feature. Jiggers were a sixteenth century continental invention which became common in Wales during the seventeenth century and were gradually replaced by mechanised mills from the 1860s onwards at the larger mines. The flat buddles and strakes common on seventeenth and eighteenth century mines were gradually ousted by the round buddle from the 1840s onwards with many examples being preserved in Powys, the best of these at Fedw Mine in Radnorshire. Large mechanised dressing mills, which put all of these processes under one roof, were a late development. Good examples in Powys are to be seen at Greens Mill, Rhoswydol and the mill on the lower dressing floors at Nantiago Mine.
- 6.25 The most productive period in Powys covered the three decades from 1845 to 1875 during which time the Van and Dylife mines were the pre-eminent suppliers of lead in the county. Van even had the distinction of being the most productive lead mine in Europe during the 1870s. The rapid drop in the price of lead during the 1870s due to cheaper foreign imports directly caused the closure of many of the Powys mines. The market never really recovered after this decade with some mines surviving on the secondary production of zinc and the reworking of old waste tips up to the first world war while others such as Van and Nantiago struggled through to final collapse by 1921.



## 7 SITES RECOMMENDED FOR PRESERVATION

- 7.1 The mines and features of mine sites listed in Table 1 are recommended for preservation. Although there may be difficulties in scheduling large mine complexes and landscapes as ancient monuments, under the 1979 Ancient Monuments and Archaeological Areas Act, it is strongly recommended that this should be undertaken in appropriate instances in order to retain the archaeological integrity of a site.
- 7.2 It is also of vital importance that management schemes should be drawn up to and implemented. Serious deterioration has continued to affect the structural fabric following scheduling, as in the case of the Frongoch Cornish Enginehouse in Dyfed, the continued collapse of dressing floor structures at Bryntail, Powys, due to displacement by tree growth, and the destruction and alteration of scheduled structures on the Ystrad Einion Mine dressing floors by recent reclamation works, Dyfed.
- 7.3 Consolidation of scheduled mine structures and non-scheduled deteriorating buildings is now being addressed through the formation of the Welsh Mines Preservation Trust which is a non-profit making charitable Trust formed by a group of members with individual skills which can be applied to the preservation and restoration of mining structures in Wales. They should be involved in future consultations about management schemes for both protected and unprotected mine sites in Wales.

**Table 1: Recommendations for preservation**

<b><i>Craig y Mwyn</i></b>	All features associated with the hushing activity
<b><i>Cwm Elan</i></b>	Entire mine site
<b><i>Cwm Orog</i></b>	The three incline tramways, ore slides and dressing floor
<b><i>Dalrhiw</i></b>	Entire mine site
<b><i>Dylife</i></b>	Entire mine site and mining landscape
<b><i>Dyfngwm</i></b>	Mining landscape on Pen Dylife and in Clywedog gorge
<b><i>East Van</i></b>	Engine house, boiler and surviving chimney stack
<b><i>Fedw</i></b>	Dressing floor area
<b><i>Llandrindod</i></b>	Entire mine site
<b><i>Llanymynech Ogof</i></b>	Entire mine site
<b><i>Llangynog</i></b>	The double concentric walled magazine
<b><i>Nantiago</i></b>	Dressing mill
<b><i>Nant y Car (South)</i></b>	Entire mine site
<b><i>Nantyricket</i></b>	Prehistoric opencut and tips
<b><i>Penyclun</i></b>	Cornish engine house, wheelpit, boiler and chimney
<b><i>Rhoswydol</i></b>	Greens' dressing mill
<b><i>Van</i></b>	Chimney stack at Seaham's Shaft

## 8 RECOMMENDATIONS FOR FURTHER WORK

- 8.2 Further archaeological survey is recommended at the sites listed below. This is a list of initial priorities relating to the more important mine sites and is largely designed to provide information to aid the drawing up of management schemes, scheduling priorities, the enhancement of development control procedures and to supplement information currently held in the Sites and Monuments Record.

**Table 2: Recommendations for further work**

<b><i>Berwyn</i></b>	Aerial photographic survey of whole mine site
<b><i>Calcot</i></b>	Aerial photographic survey of whole mine site
<b><i>Craig y Mwyn</i></b>	Measured surface survey of the hushing remains
<b><i>Cefn Pawl</i></b>	Aerial photographic survey of whole mine site
<b><i>Cwm Bach</i></b>	Aerial photographic survey of whole mine site
<b><i>Cwm Elan</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Cwm Orog</i></b>	Measured surface survey of whole site
<b><i>Cwmrhaidr</i></b>	Aerial photographic survey of the whole site
<b><i>Cyfarthfa</i></b>	Measured surface survey of whole mine site
<b><i>Dalrhiw</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Dyfyngwm</i></b>	Measured surface survey of mining landscape
<b><i>Dylife</i></b>	Measured surface survey of whole mine site
<b><i>East Van</i></b>	Aerial photographic and measured surface survey
<b><i>Fedw</i></b>	Measured surface survey of whole mine site
<b><i>Fron-Felin</i></b>	Aerial photographic survey of whole mine site
<b><i>Glyn</i></b>	Aerial photographic survey of whole mine site
<b><i>Gwestyn</i></b>	Measured surface survey of whole mine site
<b><i>Hafodfeddgar</i></b>	Aerial photographic survey of whole mine site
<b><i>Llandrindod</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Llangynog</i></b>	Measured survey of the magazine structure
<b><i>Llanymynech</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Llanymynech Ogof</i></b>	Exploratory excavation of deeply stratified deposits
<b><i>Machynlleth Park</i></b>	Aerial photographic survey of the whole site
<b><i>Nantiago</i></b>	Measured surface survey of whole mine site
<b><i>Nanty</i></b>	Aerial photographic survey of whole site
<b><i>Nantygarn</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Nant y Blaidd</i></b>	Aerial photographic survey of whole mine site
<b><i>Nant y Car (South)</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Nant yr Eira</i></b>	Measured surface survey of whole mine site
<b><i>Nantyricket</i></b>	Trial excavation of tips to confirm prehistoric dating and measured surface survey
<b><i>Penyclun</i></b>	Aerial photographic and measured surface survey of whole mine site
<b><i>Tyisaf</i></b>	Measured surface survey of whole mine site
<b><i>Tylwch</i></b>	Aerial photographic survey of whole mine site
<b><i>West Fedw</i></b>	Aerial photographic survey of whole site





Fig. 1 Gwestyn Mine (PRN 5943). A complex mixture of 19th century mine-related earthworks and earlier non-industrial features. The shaft-mounds are all located on the main E-W lode. Photo: C R Musson, RCAHWW (925089-65)





Fig. 2 Cafartha/Nantddu Mine (PRN 8497). Mid-late 19th century remains in this aerial view include the pumping wheelpit (bottom centre) from which the shallow flat rod communication trench extends to the open whim shaft at the top. Also visible are mine administration buildings (centre right) and the engine shaft (upper centre). *Photo: C R Musson, RCAHWW (925319-8)*



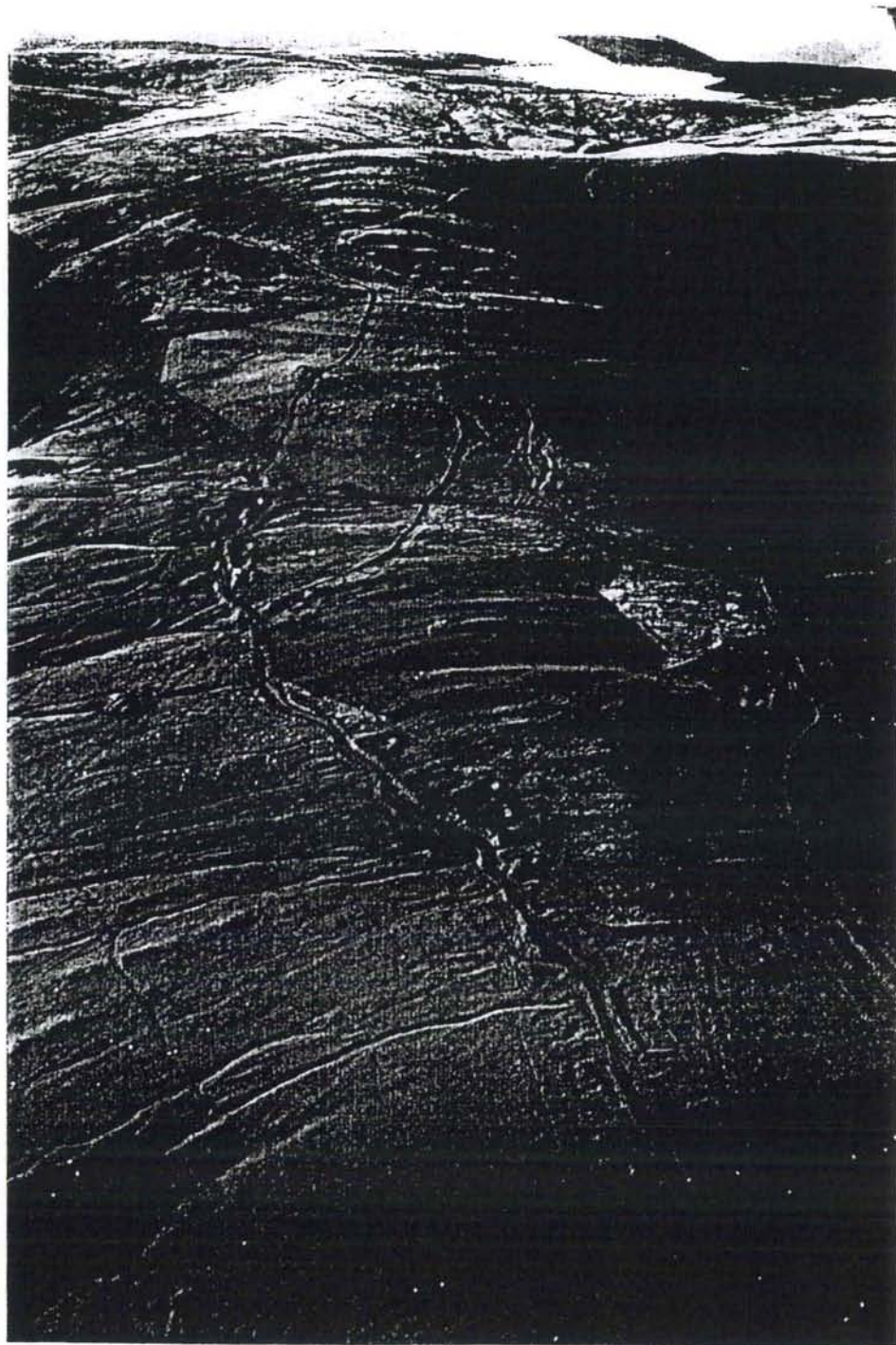


Fig. 3 Pen Dylife/Dyfnwgwm Mines (PRN 5942). Part of the extensive mining landscape showing shaft mounds, open cuts and possible hushing on the Dylife and Llechwedd Ddu lodes. The small Roman fortlet at Penycroben can be seen bottom right. Photo: C R Musson, RCAHMW (925091-42)





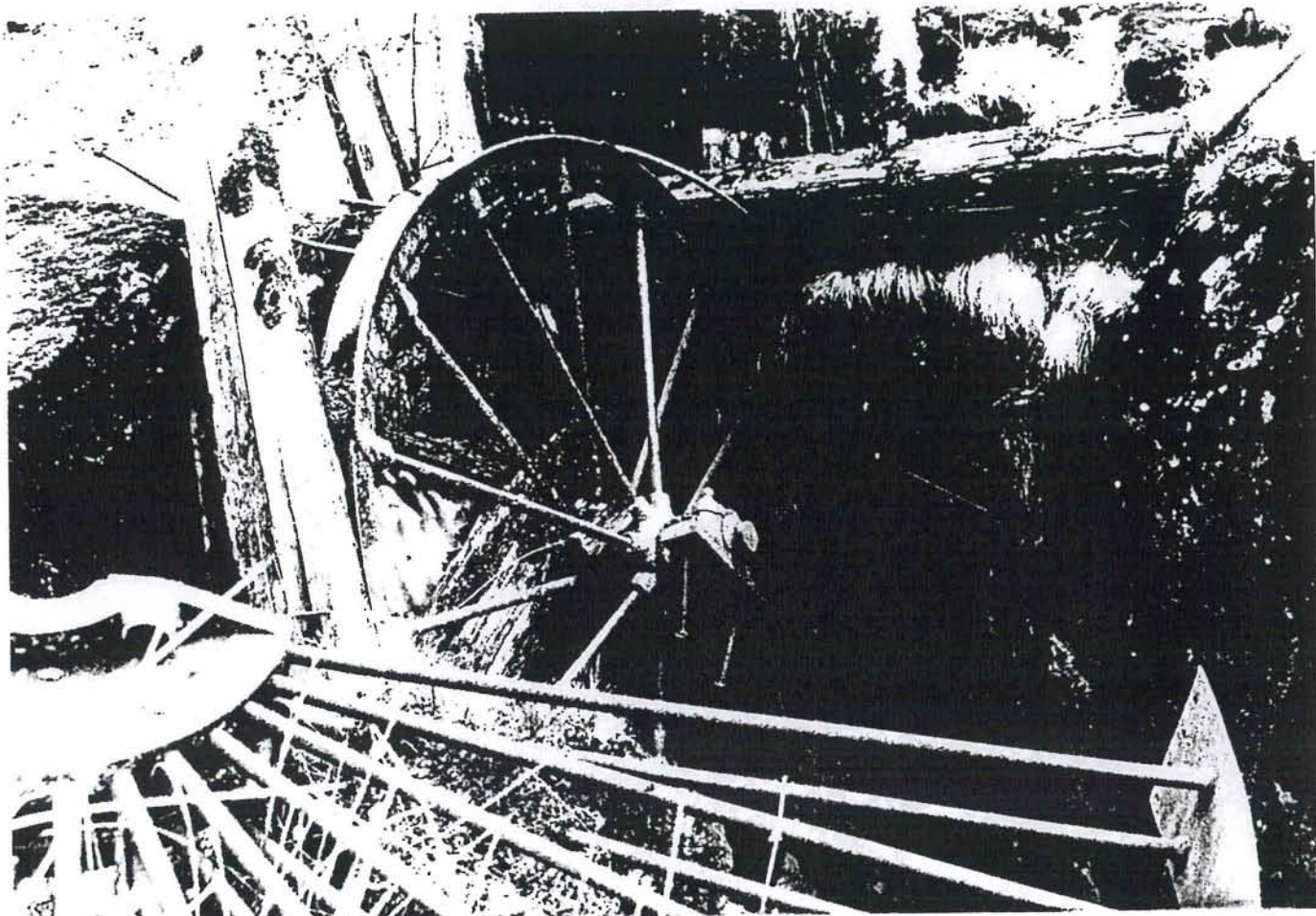
Fig. 4 Nant-yr-Eira Mine (PRN 725). The prehistoric opencut situated to the north of the 19th century dressing floors. The prehistoric tiops, which have been partially excavated, run along the fence line (top right). Many stone hammers and evidence for firesetting techniques have been found here. *Photo: CPAT 92-145-02*





Fig. 5 Dyfnwgwm Mine (PRN 5942). The substantial concrete base loadings of the 1935 Hirnant Minerals Ltd processing mill. Here all of the dispersed concentrating machinery of the 19th century dressing floors to the east has been modernised and placed under one roof. The tiered structure was purposely built to aid gravity separation methods of concentration. *Photo: CPAT 92-155-23*

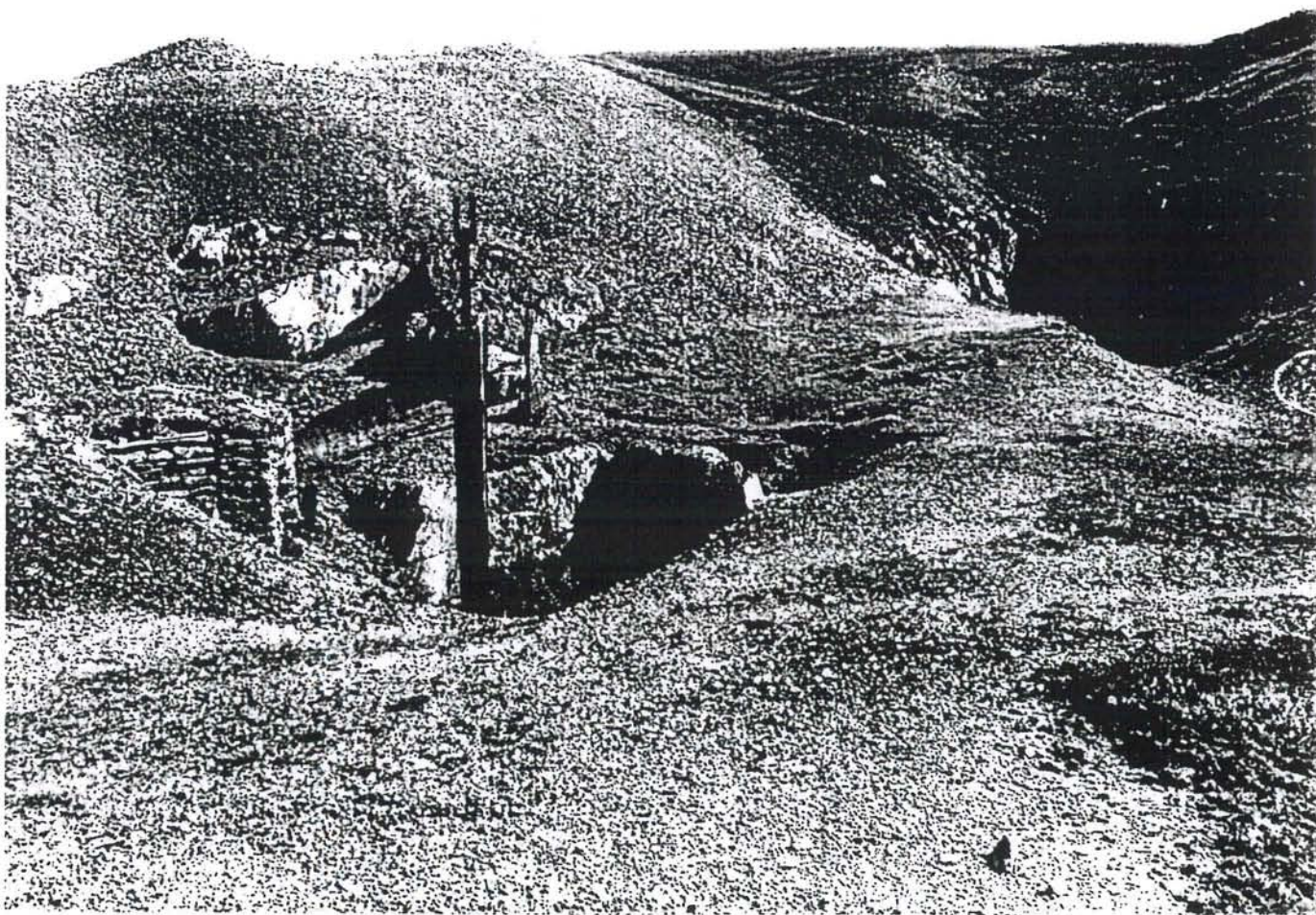
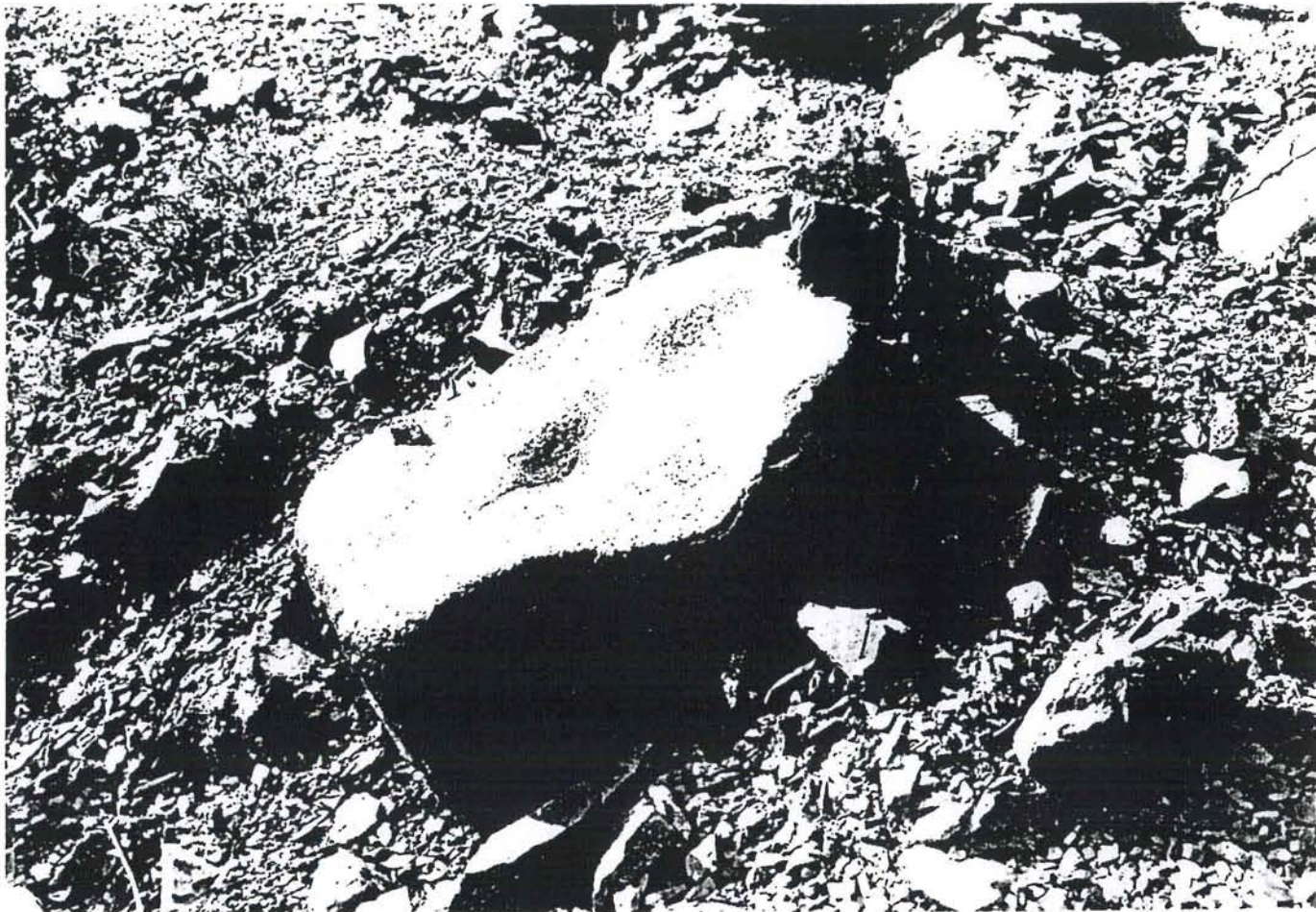




above Fig. 6 Nantiago Mine (PRN 5944). Remains of the collapsed headframe in the top of the engine shaft. Photo: CPAT 92-144-08.

below Fig. 7 Nant-yr-Eira Mine (PRN 725). The 1858/9 crusher house showing the 38x3ft water wheel pit and the 24in crusher rolls housing to the left. Photo: CPAT 92-146-28

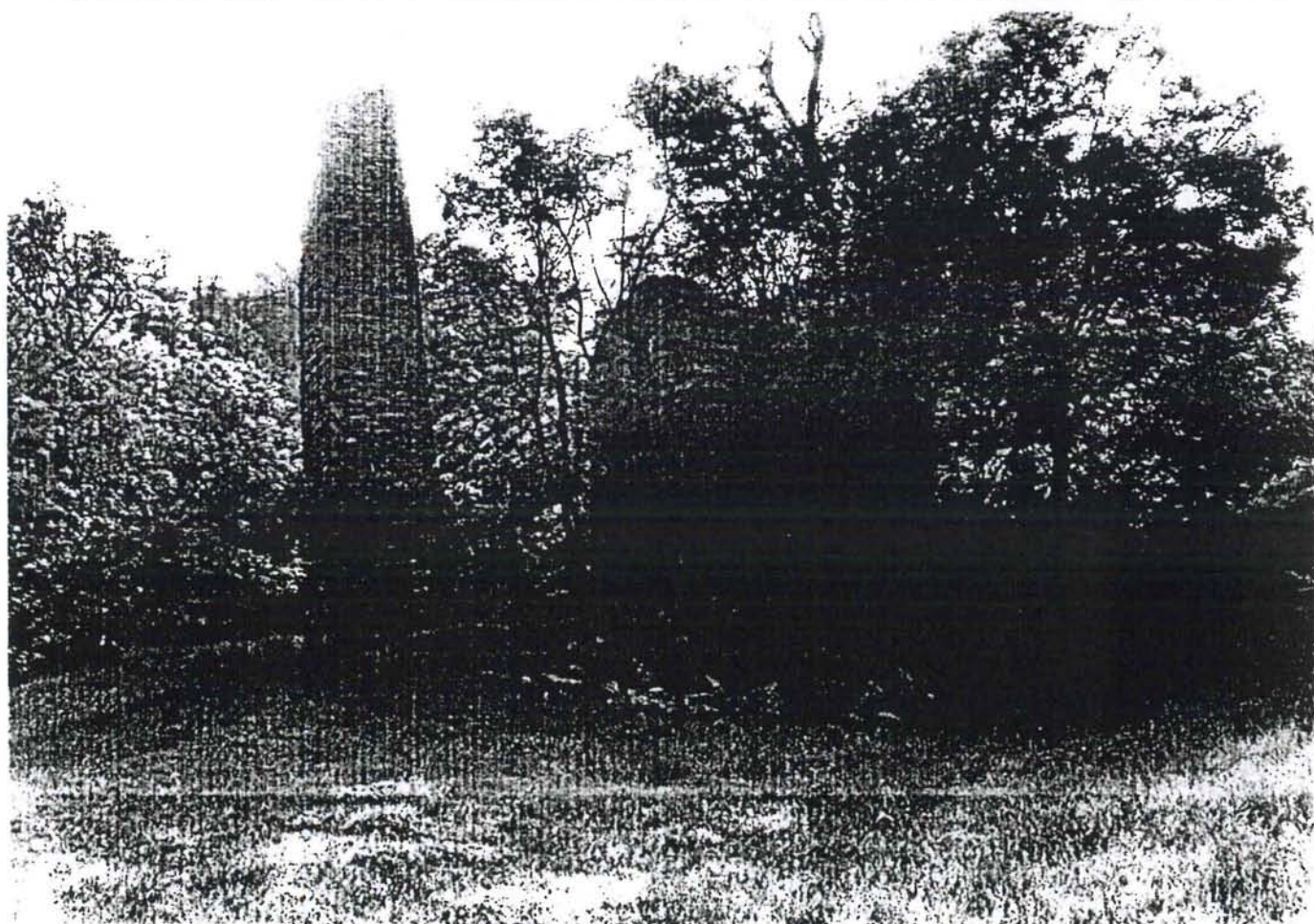
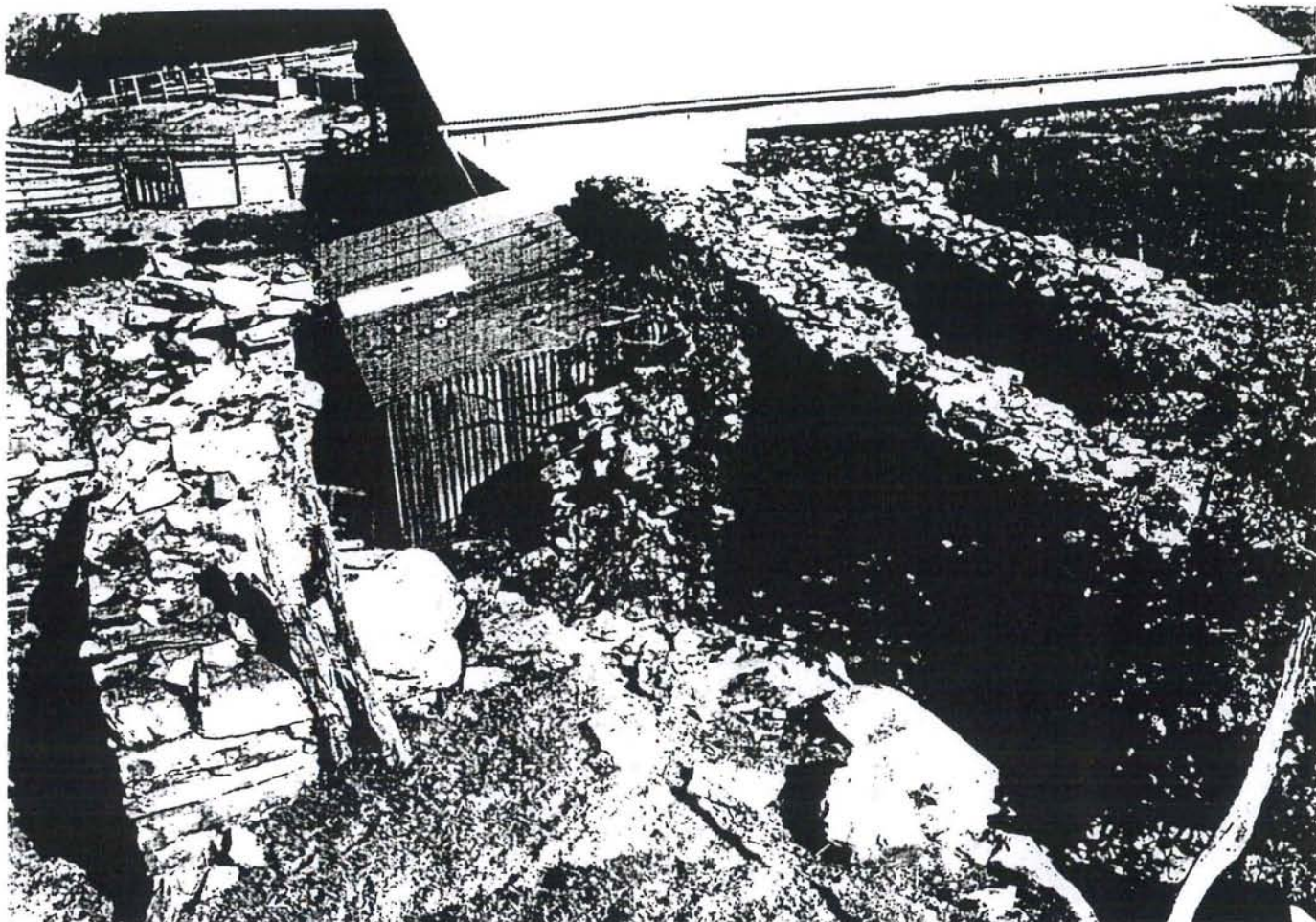




above Fig. 8 Engine Dingle, Esgairgaled, Dylife (PRN 5648). One of two bifacial multiple hollowed mortar stones. This may have been from an 18th century stamps mill although similar mortars were used from the prehistoric period up to the 19th century. Photo: CPAT 92-154-29

below Fig. 9 Dylife Mine (PRN 5648). Llechwedd Ddu engine shaft (foreground) with pumping rod and cast-iron rising main in situ. The Dylife adit can be seen in the background. Photo: CPAT 92-153-33





above Fig. 10 Cafartha/Nant Ddu Mine (PRN 8497). The crusher house wheelpit and rolls housing. *Photo: CPAT 92-156-10*  
 below Fig. 11 Penyclun Mine (prn 5938). The two-storey Cornish rotative beam engine house built in 1862. The leaning chimney needs urgent consolidation. *Photo: CPAT 92-150-12*





above Fig. 12 Nantiago Mine (PRN 5944). The c 1900 three-storey hydraulic processing plant showing one of the two pelton wheels which drove machinery. Photo: CPAT 92-142-34.



## BIBLIOGRAPHY

- Adams, D R 1992 *The Mines of Llanymynech Hill*, Shropshire Caving & Mining Club, Account No 14
- Arx, von R 1990 *The Brief Life of Melinygloch Lead Mine*, British Mining Memoirs 41, Northern Mines Research Society: Sheffield
- 1992 *Vignette on Nanty Mine*, British Mining Memoirs 45, Northern Mines Research Society: Sheffield
- Barton, D B 1989 *The Cornish Beam Engine*. Cornwall Books, 2nd edition
- Bassett, D A 1967 *A Source-Book of Geological, Geomorphological and Soil Maps for Wales & the Welsh Borders 1800-1966*. National Museum of Wales: Cardiff
- Bick, D 1985 *Dylife - A Famous Welsh Lead Mine*. The Pound House, Newent
- 1986 A Mushet Mystery, *The Journal of the Gloucestershire Society of Industrial Archaeology*, 23-26
- 1989 The Beam Engine House in Wales, *Industrial Archaeology Review* 12, No 1, 84-93. Association for Industrial Archaeology: Ironbridge
- 1990a *The Old Metal Mines of Mid Wales, Parts 4 & 5*. The Pound House, Newent, 2nd edition
- 1990b Further Evidence of Hushing in Mid Wales, *Archaeology in Wales* 30, 33-34. CBA Wales
- 1991a *The Old Metal Mines of Mid Wales, Part 6*. The Pound House, Newent
- 1991b *The Industrial Archaeology of the Van Mine, Llanidloes*. D. Bick Consultancy Reports
- Briggs, C S (ed) 1992 *Welsh Industrial Heritage: a review*, CBA Research Report No 79: London
- Buchanan, R A 1980 *Industrial Archaeology in Britain*. Allen Lane, Penguin Books
- Burt, R, Waite, P & Burnley, R 1990 *The Mines of Shropshire and Montgomeryshire*. University of Exeter Press
- Crew, P & Crew, S (eds) 1990 *Early Mining in the British Isles*. Plas Tan Y Bwlch Occasional Paper No 1
- Davies, D C 1881 *A Treatise on Metalliferous Mines and Mining*. London
- Davies, O 1935 *Roman Mines in Europe*. Clarendon Press: Oxford
- 1938 Ancient Mines in Montgomeryshire - Part 1, *Montgomeryshire Collections* 44, 55-60
- 1939 Ancient Mines in Montgomeryshire - Part 2, *Montgomeryshire Collections* 45, 152-156
- Day, J & Tylecote, RF (eds) 1991 *The Industrial Revolution in Metals*. The Institute of Metals
- Dodd, AH 1990 *The Industrial Revolution in North Wales*. Reprint by Bridge Books, Wrexham
- Foster-Smith, J R 1978 *The Mines of Montgomeryshire and Radnorshire*, British Mining No 10. Northern Mines Research Society: Sheffield
- Glamorgan-Gwent Archaeological Trust 1993 *Archaeological Field Evaluation, Fan Mines, Llanidloes, November 1993*.
- Hall, GW 1993 *Metal Mines of Southern Wales*. Griffin Publications: Herefordshire
- Hamer, E 1870 A Parochial Account of Llangurig, *Montgomeryshire Collections* 3, 231-300
- 1872 A Parochial Account of Llanidloes, *Montgomeryshire Collections* 5, 24-33
- Holding, S R 1992 *A Survey of the Metal Mines of South Shropshire*, Shropshire



- Caving & Mining Club Account No 12
- Hughes, S J S 1991 The Van Mine, *UK Journal of Mines & Minerals* 9, 16-23
- 1992 *Results of Investigations at Van Mine Near Llanidloes*. S J S Hughes Mining Services: Talybont
- Jones, J A & Moreton, N J M 1977 *The Mines and Minerals of Mid Wales*. Leicester
- Jones, O T 1922 Lead and Zinc. *The Mining District of North Cardiganshire and West Montgomery*. Memoirs of the Geological Survey Special Reports 20. Mining Facsimilies Reprint No 6, 1986
- Lewis, W J 1963-4 Lead Mining in Eastern Montgomeryshire in 1751, *Montgomeryshire Collections* 58, 114-124
- 1967 *Lead Mining in Wales*. University of Wales Press: Cardiff
- Liscombe & Co 1869-70 *The Mines of Cardiganshire, Montgomeryshire & Shropshire*. Reprint by S J S Hughes Mining Services: Talybont
- Moore, J. 1990 *Llanymynech Hillfort: A Case Study in Landscape Archaeology*. BA Thesis, Department of Archaeology, Manchester University
- Morris, T 1974 The Machynlleth Park Copper Mine, *Montgomeryshire Collections* 62, 212-216
- 1979 Mining Activity Near Newtown, Powys, *Montgomeryshire Collections* 67, 109-116
- Morrison, T A 1971 Some Notes on the Van Mine, Llanidloes, *Industrial Archaeology* 8, No 1, 24-51
- Murchison, R J 1839 *The Silurian System*. London
- Musson, C R & Northover, J P 1989 Llanymynech Hillfort, Powys and Shropshire: Observations on Construction Work, 1981, *Montgomeryshire Collections* 77, 15-26
- Palmer, M & Neaverson, P 1992 *Gazetter of Tin & Lead Ore Dressing Sites in Great Britain*, Bulletin of the Peak District Historical Mines Society 11, No 5. Matlock, Derbyshire
- Parker, W K 1983 The Presteigne Coal Venture 1912-1915, *Transactions of the Radnorshire Society* 53, 10-27
- Pryce, F N, 1932 A sketch of Roman Powysland, *Montgomeryshire Collections* 42, 99-100
- Rees, D M 1975 *The Industrial Archaeology of Wales*. University of Wales Press: Cardiff
- Timberlake, S 1990 Excavations at Parys Mountain and Nantyreira, in P Crew and S Crew (eds) 1990, 15-21
- Webster, G 1952-3 The Lead Mining Industry in North Wales in Roman Times, *Journal of the Flintshire Historical Society* 13, 5-33
- Williams, J 1905 *A General History of the County of Radnor*. Davies and Co: Brecknock
- Williams, R 1888 A History of the Parish of Llanbrynmair, *Montgomeryshire Collections* 22, 307-320
- Williams, R A 1985 *The Old Mines of the Llangynog District*, British Mining 26. Northern Mines Research Society: Sheffield
- Woodall, F D 1991 *Steam Engines and Waterwheels*. Frazer Stewart, 2nd edition
- Wren, W J 1968 *The Tanat Valley - Its Railways and Industrial Archaeology*. Reprint by Augustus M Kelley Publishers: New York



## **PART 2 GAZETTEER OF SITES**

### **INTRODUCTION TO GAZETTEER**

#### **Abbreviations**

The following abbreviations are used in the gazetteer:

CPAT	Clwyd-Powys Archaeological Trust
NGR	National Grid Reference
OS	Ordnance Survey
PAR	Powys Archaeological Record
RCAHMW	Royal Commission on the Ancient and Historical Monuments in Wales
SAM	Scheduled Ancient Monument
SMR	Sites and Monuments Record

#### **Maps accompanying the Gazetteer**

Two maplets accompany each entry in the gazetteer.

The first is at 1:10,000 scale showing the site's location and indicating the approximate areas of archaeological sensitivity (subject to further appraisal) within which the general recommendations made in the introductory text and individual ones for each mine site apply.

The second map is a copy of either the Ordnance Survey's 25" 1st or 2nd edition map or, where this is not available, the 6" 1st or 2nd edition, and is included to show detail of the mine workings. Copies of these maps are for identification purposes only and are presented at a variety of scales. Where neither of these maps are available (many upland areas were not fully surveyed for either edition), or where insufficient detail is shown, this second map has been omitted.

#### **Concordance of mine names**

A concordance of mine names, record numbers and Planning Districts is given in an appendix.



<b>8480</b>	<b>ABERDAUNANT (Lead)</b>		<b>NGR</b>	SN90658655	SN98NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without		380 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Prehistoric/18th century-1879
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture

**Geology**

Ordovician Van Formation grits. The vein strikes SW-NE. Mineralisation includes galena and sphalerite in a quartz gangue.

**Workings**

3 adits, a crosscut level, and an engine shaft relate to the most recent workings. The levels are situated immediately north of Nant Gwestyn in the valley bottom. The engine shaft is at SN90788655.

Some ancient levels and trials exist on the northern end of the lode below Pen Y Gaer hillfort at SN90758675.

There is a narrow opencut with traces of lead mineralisation in the side walls at SN91008675. There may have been a shaft through the bottom of this feature which is now infilled. This working and trials around it belong to a group of workings known as Crowlwm but was probably worked with the Bryntail or Aberdaunant setts.

**Transport**

No evidence.

**Power**

A 30ft waterwheel to drive the crushers was installed in 1871. This was supplied with water by a 200 yard long leat which has been cut into the bedrock in places. The wheelpit is still visible at basal foundation level.

In 1876 an engine house was completed and housed a 16hp twin cylinder engine. The engine house survives partially but urgently needs some consolidation work if the walls are to survive an imminent collapse.

**Processing**

30" crushers, buddles, and jiggers were all formerly present on this site. Only the base of a possible ore slide and the crusher wheelpit are recognisable at present. Overall the dressing floors are poorly preserved.

**Other features**

A possible mine office building foundation is visible on the dressing floors at the foot of the slope.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

The engine house is in urgent need of repair and restoration work if the present structure is to be prevented from imminent collapse. The Welsh Mines Preservation Trust, and CPAT, should be consulted with regard to an appropriate scheme of maintenance work.

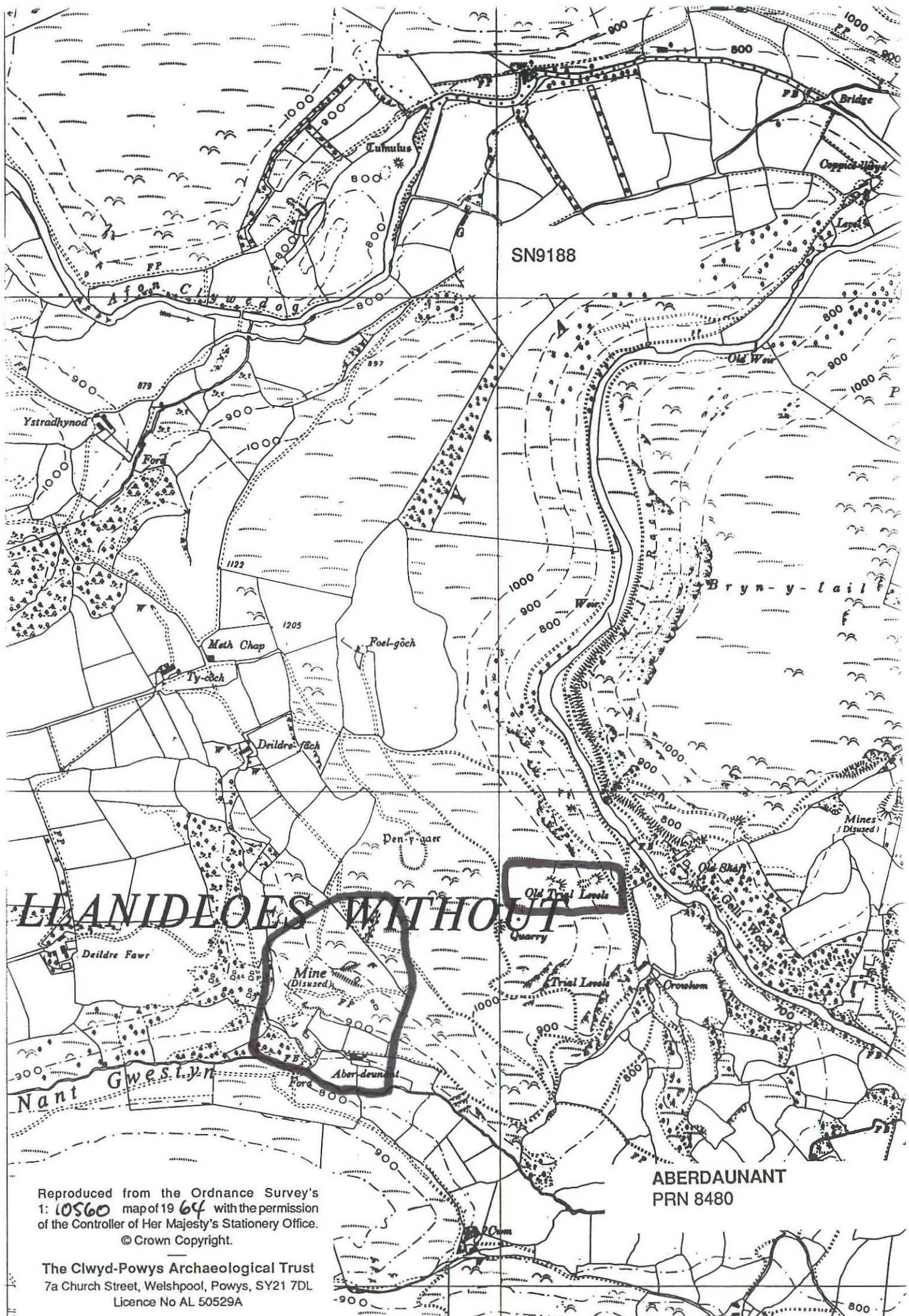
**References**

Bick 1990a, 34-35  
 Bick 1991a, 11-17  
 Foster-Smith 1978, 25  
 Hamer 1872, 27-8  
 Jones & Moreton 1977, 12  
 Jones 1922, 45, 167  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 92/CS/1564-1567  
 RCAHMMW 925089/61-63





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<b>8485</b>	<b>ALLT-Y-MAIN (Lead/Barytes)</b>		<b>NGR</b>	SJ163144	SJ11SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Melfod		160 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1751-1845
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Woodland

**Geology**

The main vein trends NE-SW with galena & barytes mineralisation in Silurian Llandoveryian shales and mudstones.

**Workings**

There is evidence of pre 1751 opencut trenches and a shaft and opencast filled with deads and rubbish on top of the hill at SJ16331445. In 1769 a level was driven on the lode. In 1845 some trials were driven which appear to have been only partially successful. There is a shaft and level at SJ171151 just above the Melfod road which are shown on the first edition map of 1885.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

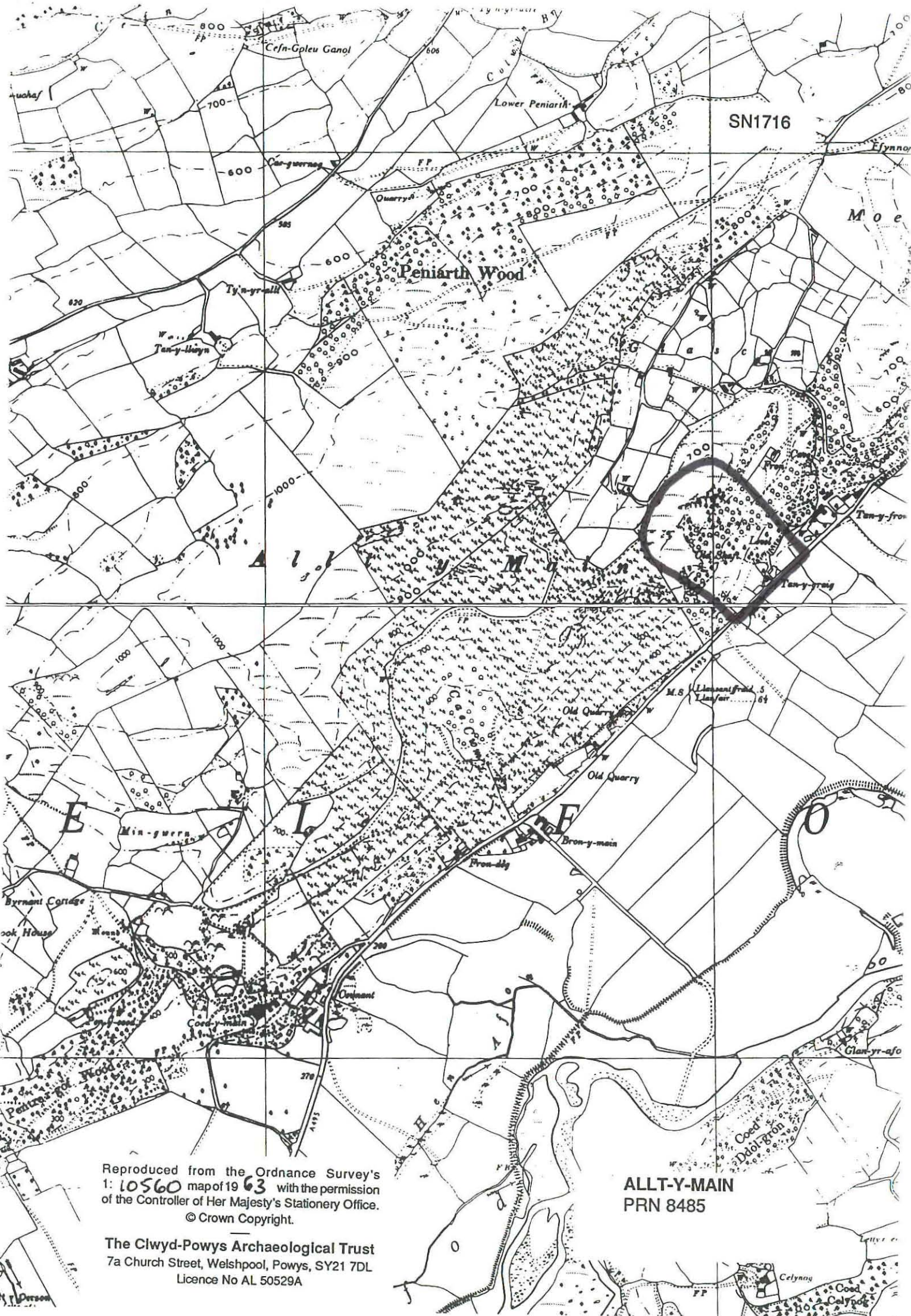
Bick 1990a, 44

Foster-Smith 1978, 32

Ordnance Survey 1st Edition 25 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993



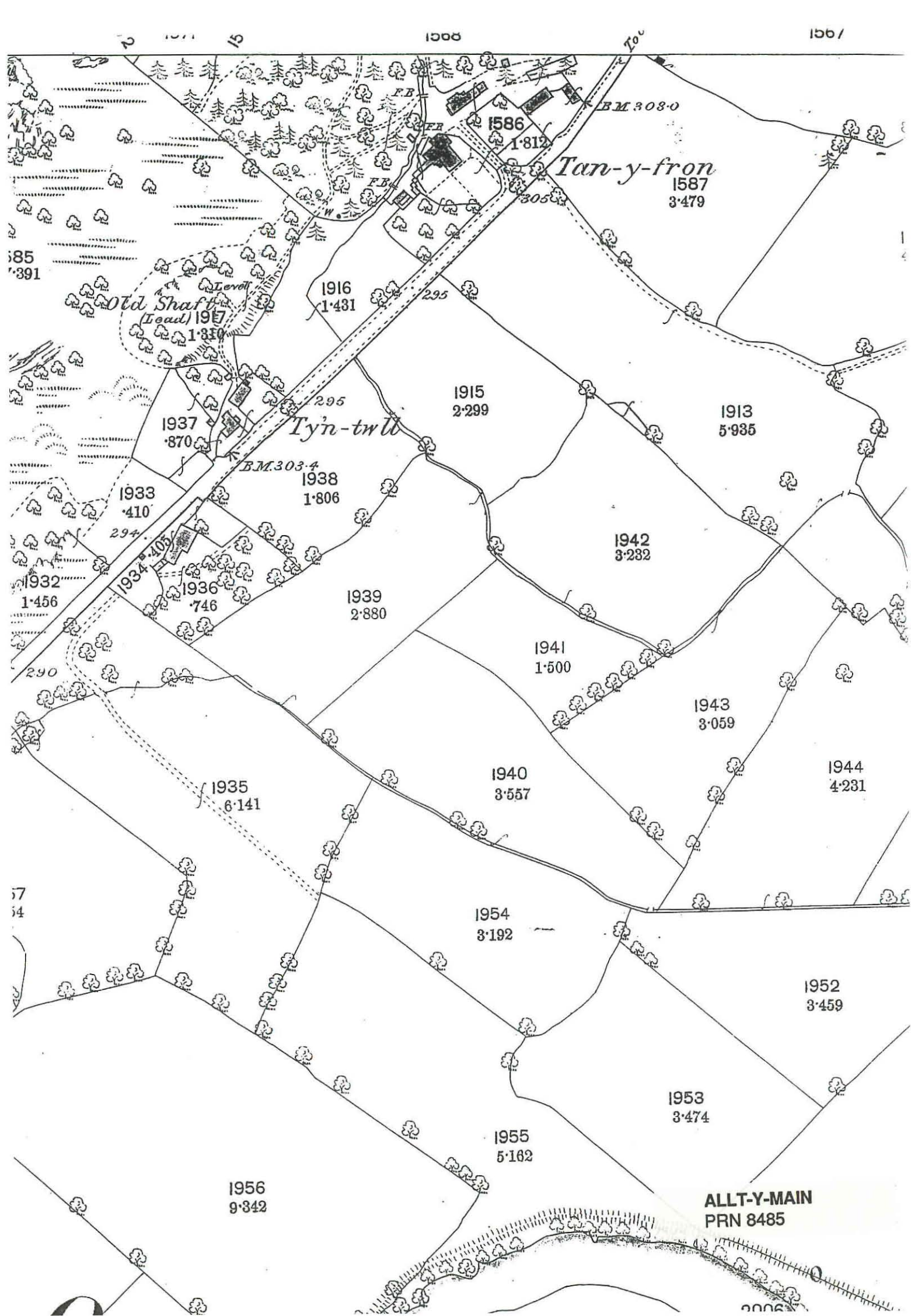


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ALLT-Y-MAIN  
PRN 8485







<b>5077</b>	<b>BACHEIDDON (Lead)</b>			<b>NGR</b>	<b>SN83709708</b>	<b>SN89NW</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			<b>330 mOD</b>
<b>Form</b>	Earthworks	<b>Condition</b>	Near Intact	<b>Date</b>	1851-1863	
<b>Threat</b>	Refuse dumping	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Lower Silurian Frongoch formation. Mineralisation includes galena and sphalerite in a vein trending ESE/WNW.

**Workings**

A long E-W opencut is the main surface feature with two shafts through its base at SN83679707 which connect with a level driven into the hillside to the south at SN83629698. Numerous trials are located around the opencut which were probably attempts to find extensions of the lode.

The level to the south connects with workings at the Rhoswydol mine.

Two levels and a shaft are located approximately half a mile to the west both above and within Nant Cymdu. The upper level is located at SN82309750. The level in the bottom of Nant Cymdu is located at SN82209720 while the shaft can be found at SN81729762.

**Transport**

An inclined trackway runs up the hillside from the southern level. This track possibly continues to the north-west and ultimately led to the Rhoswydol dressing floors.

**Power**

None present. Processing was presumably completed at Rhoswydol Mine.

**Processing**

There is some slight evidence for manual concentration of mined ore in the spoil tips before it was transported to Rhoswydol.

**Other features**

Some unusual earthworks were found to the east of the main opencut which may be earlier workings at SN97098348. Two circular banks 2.40m in diameter were recorded with associated and partly enclosing banks to the east and west.

A rectangular platform to the east of these was cut into the hillside and measured 14x3m SN83509708.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

**References**

Bick 1990a, 9  
 Foster-Smith 1978, 15  
 Jones & Moreton 1977, 12  
 Jones 1922, 152-3  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

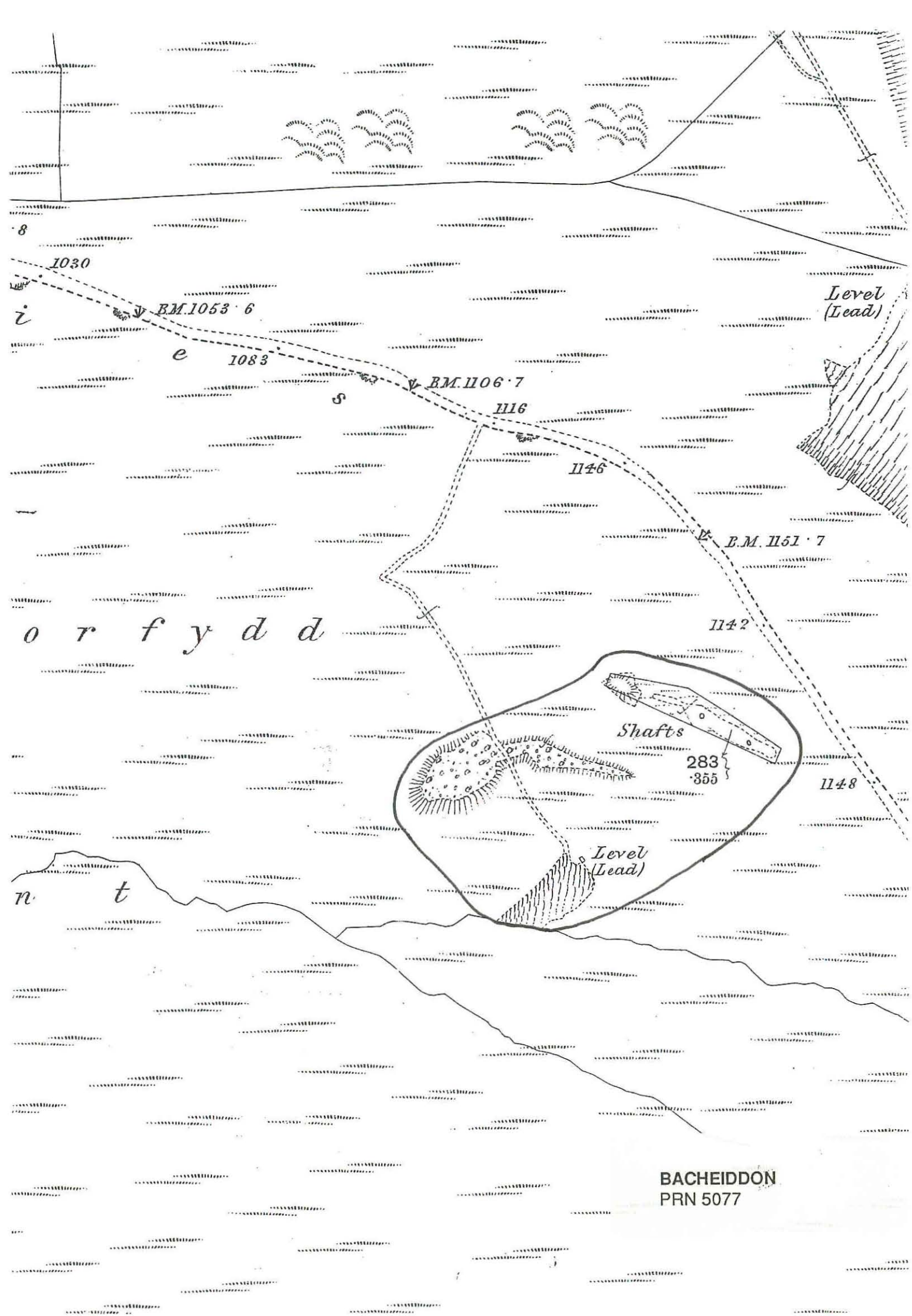
**Photographs**

CPAT 162.00-36  
 RCAHMMW 93/CS/1633-1634  
 RCAHMMW 925096/48-50











**6804 BERWYN (Phosphate)****NGR**

SJ01382943

SJ02NW

**District** Montgomeryshire**Community** Llangynog

475 mOD

**Form** Earthworks**Condition** Near Destroyed**Date** 1872-1883**Threat** None**Status** None**Land use** Pasture**Geology**

Ordovician Bala Limestone with Calcium phosphate and barytes mineralisation.

**Workings**

There are three air shafts at the southern end of the level around SJ01392939. The level entrance and open stoping to the surface can be seen at SJ01402942 with trials immediately to the north.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

There are traces of two structures close to the level entrance but their function is not clear.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Bick 1990a, 42

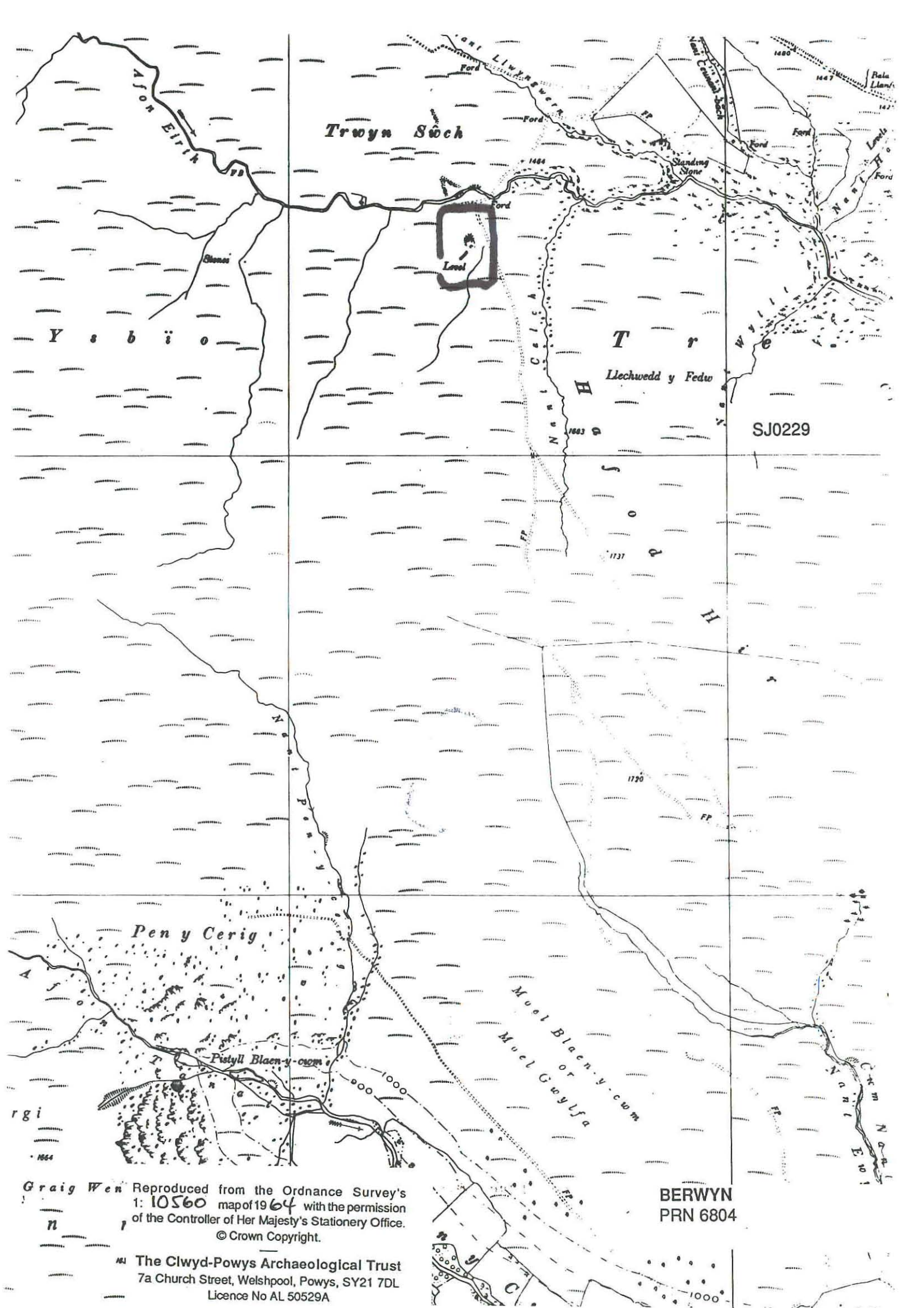
Davies 1881

Foster-Smith 1978, 3

Regional SMR: Clwyd-Powys Archaeological Trust 1993

Williams 1985, 114-16





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BERWYN  
PRN 6804



<b>8461</b>	<b>BRYNFEDWEN (Lead)</b>			<b>NGR</b>	SN85509701	SN89NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			370 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	Pre 1853-1858	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Lower Silurian formation rocks. Four lodes were investigated on an E-W strike. Mineralisation includes lead and silver.

**Workings**

Two shafts are located at SN85209733 & SN85269707 and three levels are shown on the 1st edition 1887 map.

**Transport**

In 1855 a short railroad was constructed from the shaft on the top of the hill to the dressing floors .

**Power**

A small reservoir at SN85309685 fed a crushing waterwheel at SN85389700.

**Processing**

A single crusher was recorded. The crushing machinery was removed to Cwmrhaidr mine in 1858.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 28-29

Foster-Smith 1978, 16

Jones & Moreton 1977, 12

Jones 1922, 16

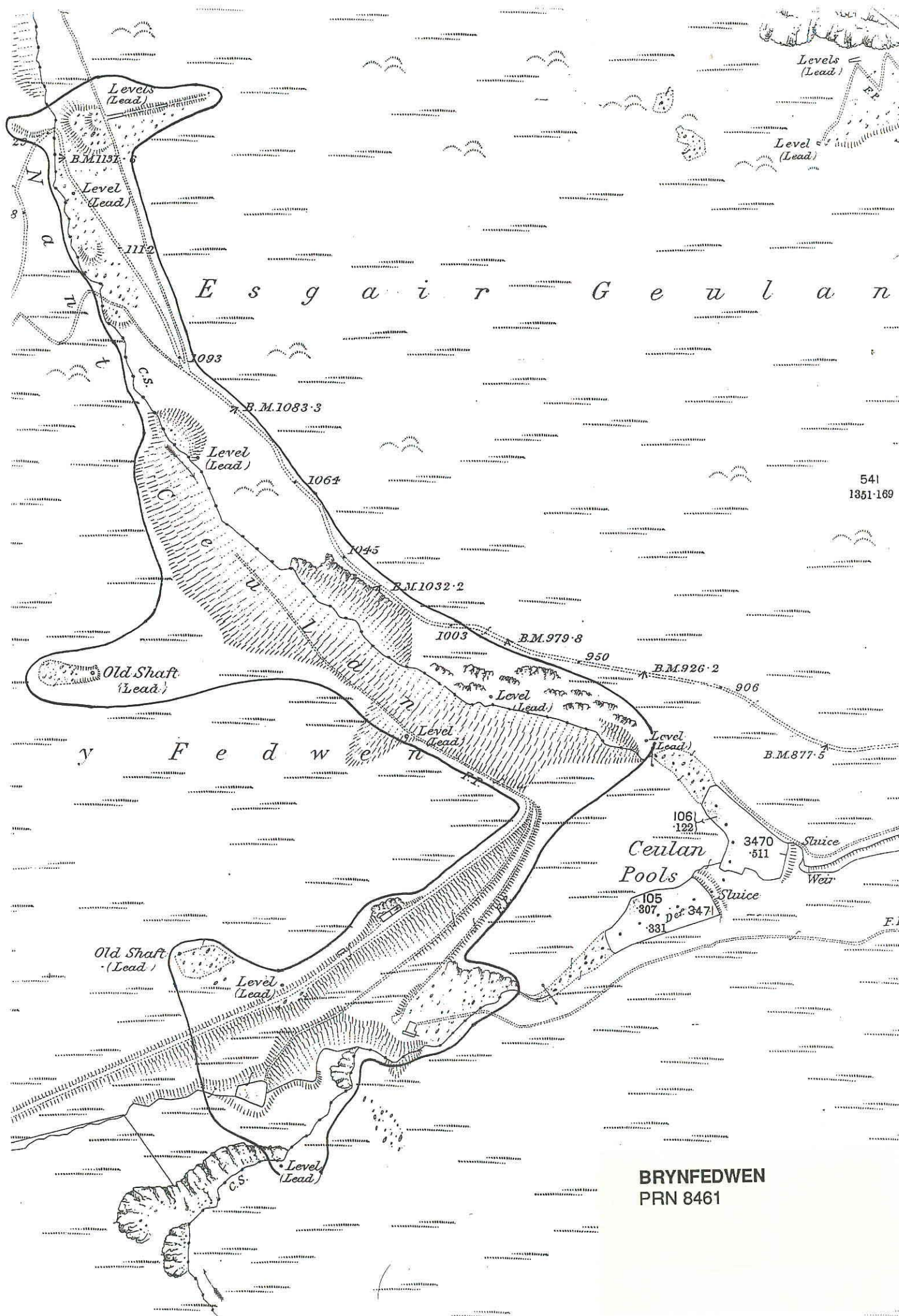
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<b>8484</b>	<b>BRYNPOSTIG (Lead)</b>			<b>NGR</b>	SN97128222	SN98SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			320 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Destroyed	<b>Date</b>	1771-1878	
<b>Threat</b>	Tipping	<b>Status</b>	None	<b>Land use</b>	Tipping	

**Geology**

Silurian Frongoch formation geology with a single E-W vein containing galena and sphalerite mineralisation.

**Workings**

There was a cross-cut adit on an E/W alignment at SN96498216 and 3 shafts are located at SN97038226, SN97158226, SN97388221.

**Transport**

No evidence.

**Power**

The engine house which was used for pumping, drawing and crushing was sited at SN97048237 but has recently been destroyed by the council tipping.

All other evidence has been destroyed.

**Processing**

All evidence has been destroyed by the tipping area.

**Other features**

A long rectangular storage shed/mine office building survives as part of the tipping sites block of administration buildings and is used as a store shed SN97038235. Basal remains of the magazine are preserved within the adjacent forestry plantation.

**Recommendations**

As this site has been extensively destroyed by the expansion of the tipping area no recommendations are made for this site.

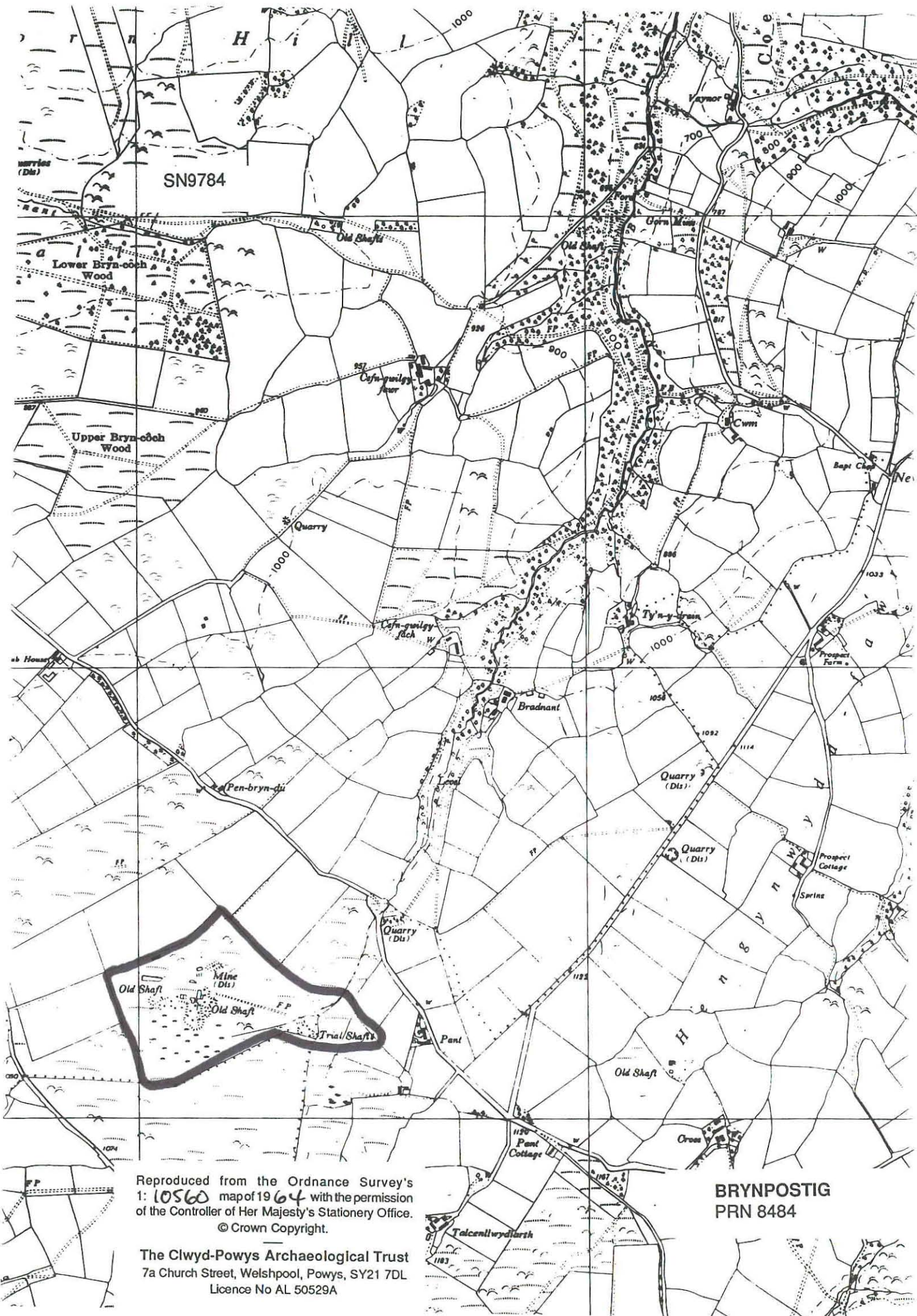
**References**

Bick 1990a, 48-50  
 Foster-Smith 1978, 31  
 Jones & Moreton 1977, 12  
 Jones 1922, 166  
 Ordnance Survey 1st Edition 25 inch Map XLVIII(5)  
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**Photographs**

CPAT CS93/25/36-38





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**BRYNPOSTIG**  
PRN 8484



Well  
*Pen-bryn-du*

1246  
25-183

F.P.

1245  
7-760

1265  
8-202

1264  
9-918

1271

*Bryn-posteg Lead Mine*  
33-196 (Disused)

1272<sup>a</sup>  
109

Sluice

Magazine

Shaft

F.P.

1274  
6-447

1272  
4-340

3<sup>rd</sup> R.H.

3<sup>rd</sup> R.H.

**BRYNPOSTIG**  
PRN 8484



<b>1842</b>	<b>BRYNTAIL (Lead/Barytes)</b>			<b>NGR</b>	SN91338685	SN98NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			220 mOD
<b>Form</b>	Earthworks/Structures/Documen	<b>Condition</b>	Damaged	<b>Date</b>	18th century/1845-1869	
<b>Threat</b>	Farming	<b>Status</b>	Scheduled (part)	<b>Land use</b>	Guardianship Monument,/Pasture	

#### Geology

A NE-SW striking lode in Ordovician Van formation grits and mudstones with galena, witherite and barytes mineralisation.

#### Workings

There are 3 main shafts including Murray's shaft at SN92008710, Gundry's shaft at SN91818700 and the Western shaft at SN91338690. There is also a deep adit at SN91328690.

The older workings include two filled in shafts at SN91558690 and another possible filled in level at SN91668699 to the east.

#### Transport

There are well preserved traces of earthwork incline tramway track beds between Gundry's shaft and the eastern dressing floors. There are similar remains between Murray's shaft and the top of the incline.

There is a leat connecting the eastern dressing floors with the western dressing floors. It contours the hillside in Gelli Wood and supplied water to the crushers at the upper mill.

#### Power

A pumping/winding engine house was erected at Murray's shaft in 1877. The building has been almost totally destroyed through backfilling of the shaft and use of the area for storing farm produce.

There is a large scheduled building immediately east of Gundry's shaft at SN91818700 which housed pumping and winding machinery powered by a line of flat rods from the 60ft diameter waterwheel on the lower dressing floors. Substantial remains can be seen of this two-storey structure which has brick arches above doors and culverts with brick surrounds for the windows. There are two long linear pit-like features on the ground floor while the largest room on the eastern side of the building contains a filled pit in the floor and a chimney built into the wall on the north side. There was presumably also an engine mounted in this building for driving the machinery when water was affected by drought.

The western dressing floor and barytes mill were driven by water supplied in the leat mentioned above which runs through Gelli wood from a stream to the east. There was also a leat drawing water from the Clywedog to this site from the north.

There are two wheelpits on the upper dressing floors for crushing, winding and pumping one of these housed a 25x5ft wheel.

#### Processing

The barytes mill is well preserved at SN91338680 due to protection from scheduling and limited reconstruction of the buildings. There are two crushers, ore bins, roasting ovens and precipitation tanks.

The eastern dressing floors at SN91758665 consist of a terraced dressing mill. There are two ore bins, jigger placements, a washing and picking floor area, and three round buddles. A linear run of seven slime pits descend the slope down to the river below the mill. The 60ft diam. wheelpit drove the pumping rods to Gundry's shaft. Of the latter only one side wall is intact the other having collapsed. There are a number of mounting bolts in-situ.

There are a number of other rooms below and adjacent to the ore bins whose purpose is not clear.

#### Other features

There are mine office, smithy and store buildings on the western dressing floors.

There is a circular, roofless magazine at SN91668700.

It would seem probable that some of the buildings at Bryntail Farmhouse were formerly used for mine offices, storehouses although precise evidence is lacking.

#### Recommendations

The barytes processing mill area of the mine below the Clywedog dam together with the lead dressing floors to the east and the engine house at the head



of the inclined plane are all protected by scheduling (SAM Mg159). No development of any kind can take place on these sites without prior consent from the Welsh Office via Cadw: Welsh Historic Monuments.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

There is an urgent need for some clearance and consolidation to the 60ft wheelpit and ore bins on the lower (eastern) dressing floors where small trees which have taken root and are displacing the standing masonry remains. The Welsh Mines Preservation Trust, and CPAT, should be consulted with regard to an appropriate scheme of work for these remains.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site should be carried out.

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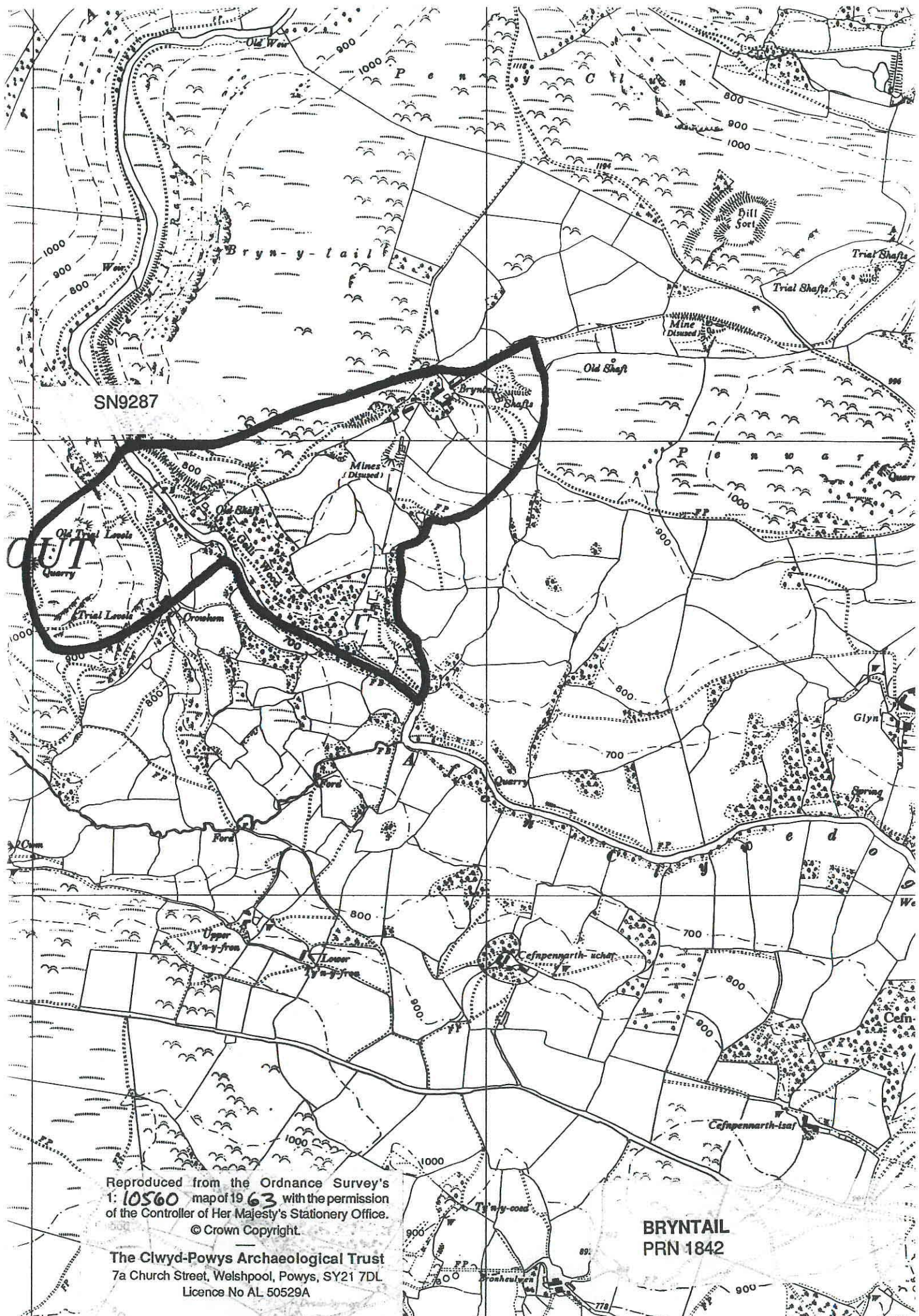
#### References

- Bick 1990a, 35-40  
 Bick 1991a, 11-17  
 Burt et al 1990, 48  
 Foster-Smith 1978, 26  
 Jones & Moreton 1975, 12  
 Jones 1922, 45, 161-2  
 National Library of Wales Mine Plans: Longitudinal section of Van Consols Lead & Barytes Mine by James Roach, Feb. 1872  
 National Library of Wales Mine Plans: Plan of Bryntail in the Parish of Llanidloes (tracing of tithe map 1840s ?)  
 National Library of Wales Mine Plans: Working plan of the United Van Consols & Glyn Lead & Barytes Mines Ltd. Llanidloes. By James Roach June 1879  
 Ordnance Survey 1st Edition 25 inch Map XLI(15)  
 Ordnance Survey 1st Edition 25 inch Map XLI(2)  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

#### Photographs

- CPAT CS92/10/24-36  
 CPAT CS93/41/03-26  
 RCAHMMW 92/CS/1560-1563  
 RCAHMMW 925089/56-60  
 RCAHMMW 925318/04-05  
 RCAHMMW 925088/55  
 RCAHMMW 925100/55



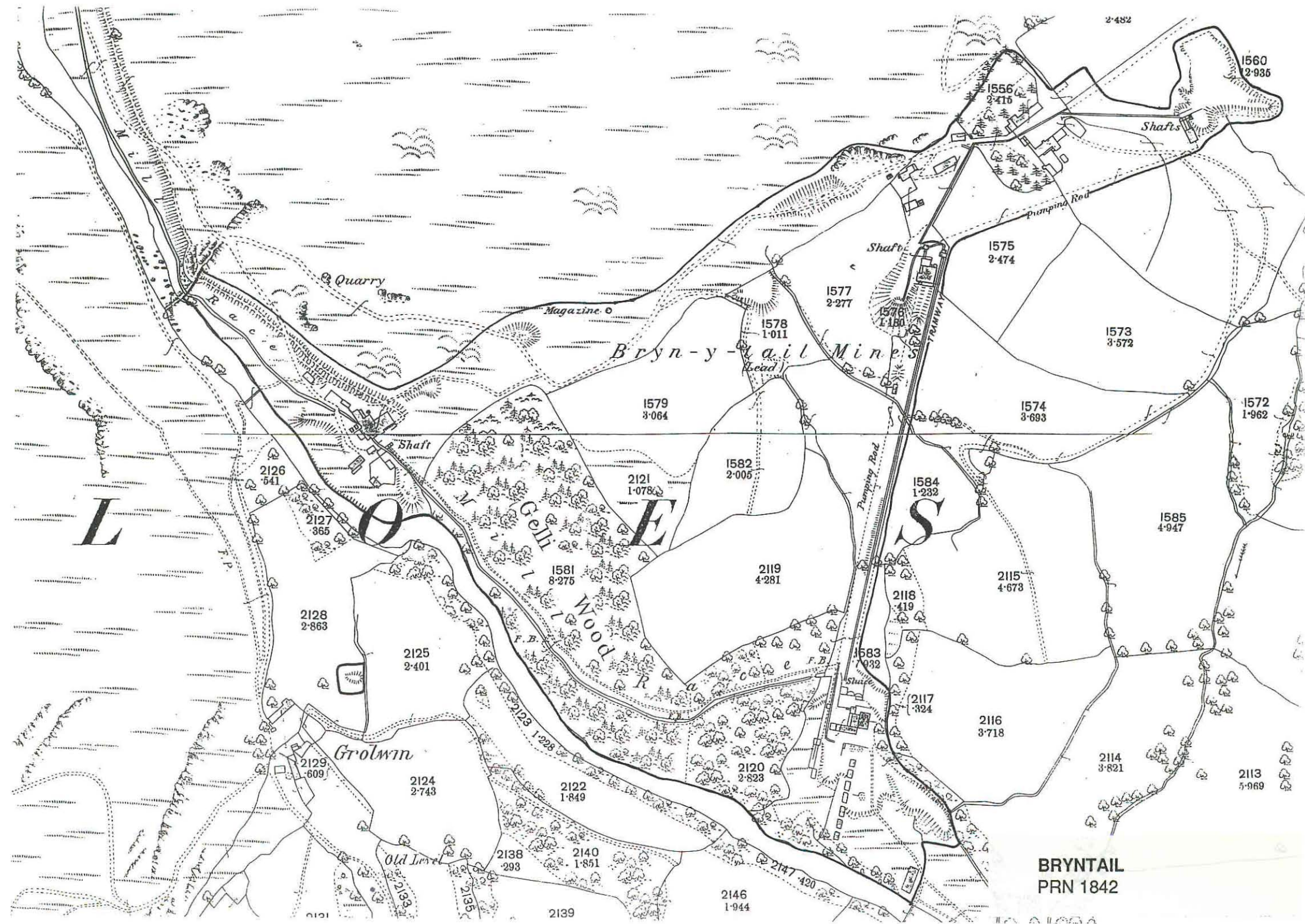


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**BRYNTAIL**  
**PRN 1842**





BRYNTAIL  
PRN 1842



<b>5927</b>	<b>BWLCH CREOLEN (Lead)</b>			<b>NGR</b>	<b>SJ09752305</b>	<b>SJ02SE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanrhaeadr-ym-Mochnant			<b>400 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1840s-1882	
<b>Threat</b>	Forestry	<b>Status</b>	none	<b>Land use</b>	Forestry/Dwelling and garden	

**Geology**

Ordovician sandstone and shale. There is a north-west striking vein of calcite with galena and barytes.

**Workings**

There are 4 levels with crosscuts and some opencuts centred on SJ09202295.

**Transport**

There is an incline and tramway in the forestry at SJ09202295.

**Power**

The engine house can still be seen at SJ09752305; it has now been converted to a dwelling. The chimney has been destroyed during conversion.

**Processing**

A crusher house and round buddles could formerly be seen on the dressing floors at SJ09752305 but these have since been destroyed by conversion of the engine house and the creation of a rear garden area.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 40-41

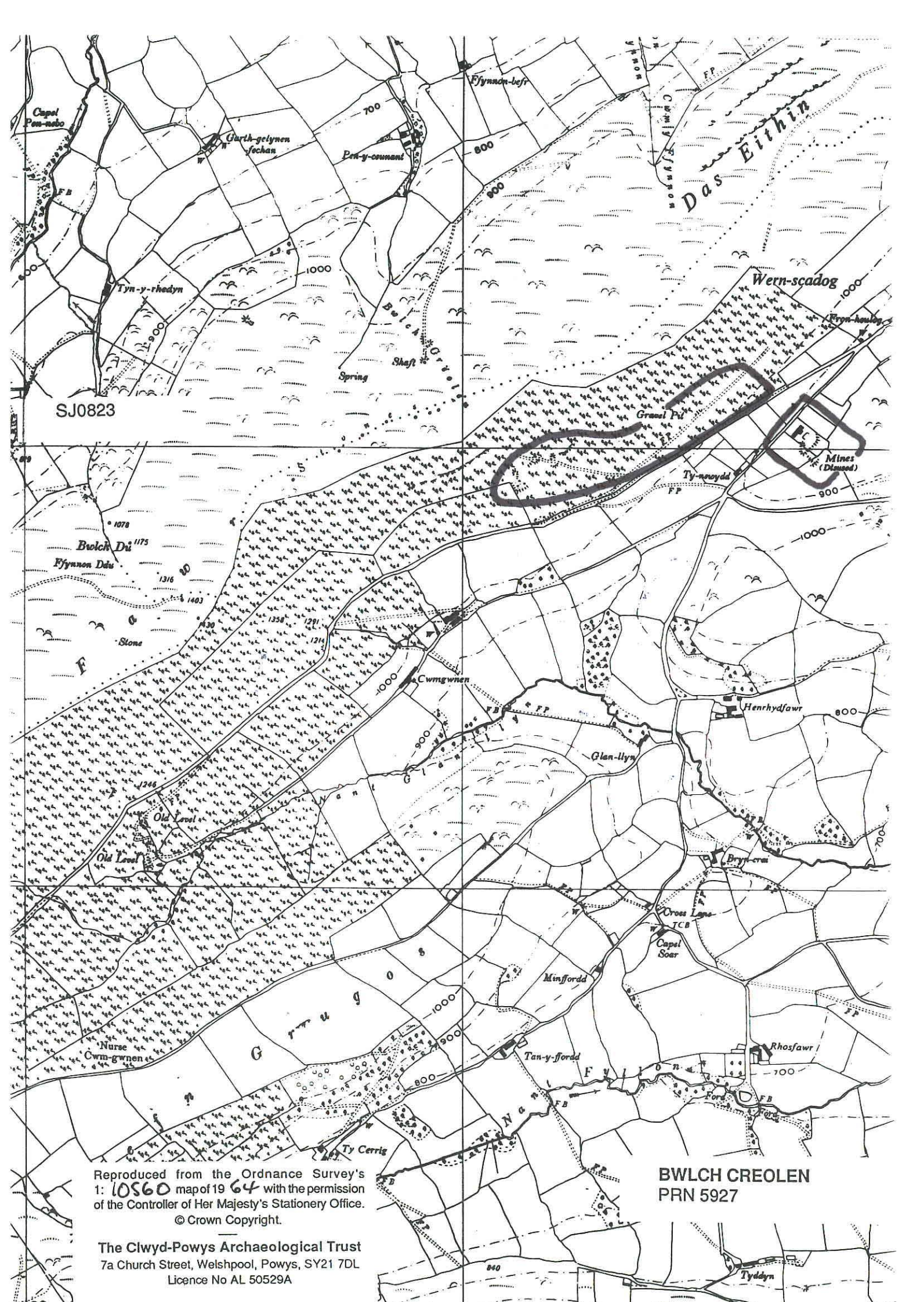
Foster-Smith 1978, 8

Ordnance Survey 1st Edition 25 inch Map V(13)

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Williams 1985, 108-114





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**BWLCH CREOLEN**  
PRN 5927



<b>18980</b>	<b>CALCOT (Barytes)</b>			<b>NGR</b>	SO29769721	SO29NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Churchstoke			300 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1914-1918	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician volcanics with an east-west striking vein of barytes mineralisation.

**Workings**

There is a run-in level at SO29859718 which is collapsing at surface. To the west is an inclined shaft with stoping up to the surface (now blocked by rubbish) and a connecting narrow level from the north SO29759717. There are trials above the stoped out area and to the north of the stream running through the mine sett.

**Transport**

There are traces of earthwork tramway beds leading from the stoped area and the run-in level.

**Power**

No evidence.

**Processing**

There are numerous heaps of crushed rock debris in the vicinity of the shaft with traces of low stone walls relating to former buildings whose function is not known. There is a small reservoir at SO29749715 which may have been used in a washing process.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

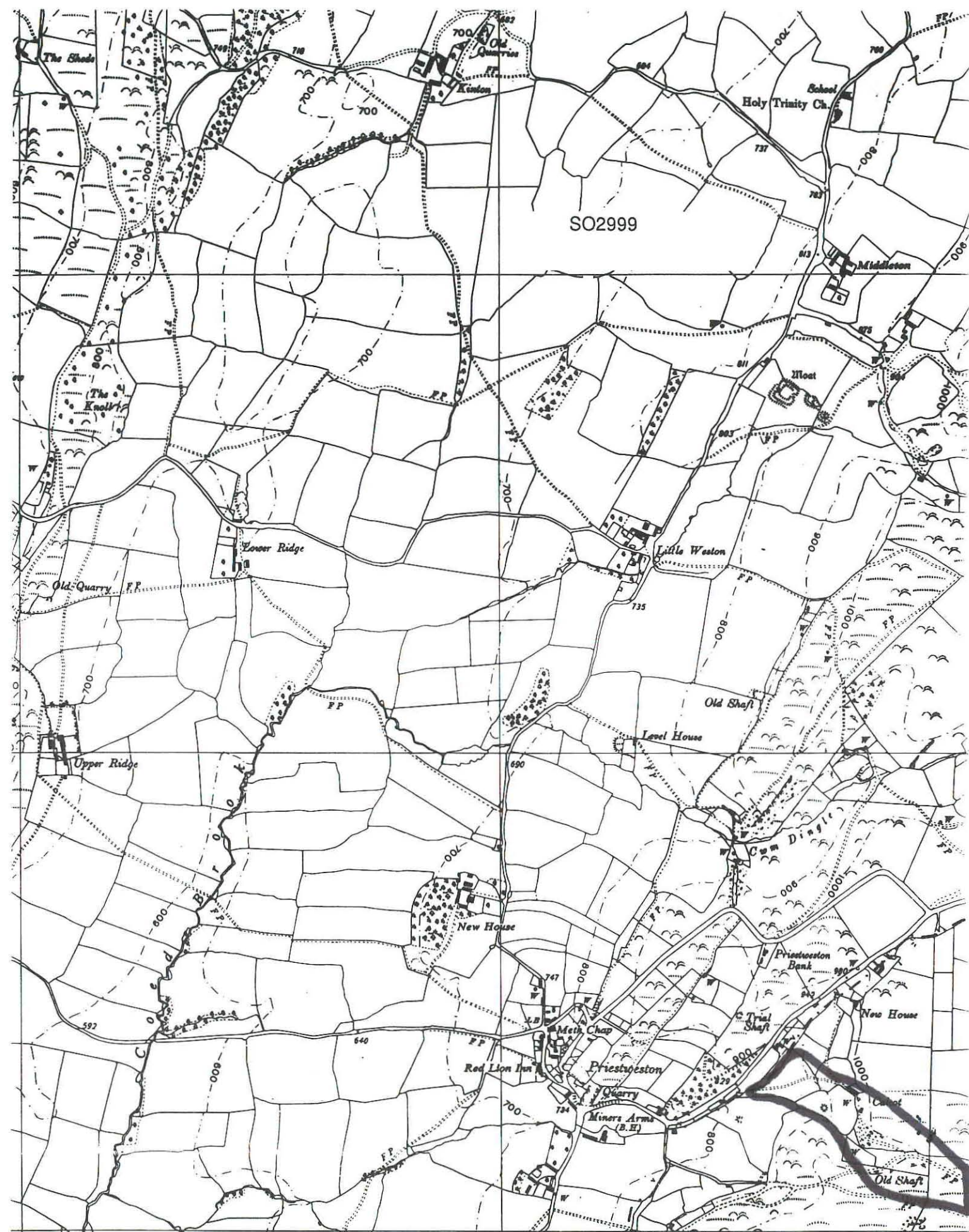
**References**

Foster-Smith 1978, 9

Holding 1992, 28

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**CALCOT**  
PRN 18980

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Little Aldress

L a n F a w r



<b>5518</b>	<b>CEFN COCH (Lead /Copper)</b>			<b>NGR</b>	SN84005355	SN85SW
<b>District</b>	Brecknock	<b>Community</b>	Llanwrtyd Wells			388 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1860s	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

The lode strikes north-south in Silurian grits and mudstones with galena, chalcopyrite and pyrite mineralisation.

**Workings**

These consist of a shaft at SN53578402 and a trial or deep adit at the foot of the hill.

**Transport**

Some short earthwork tramway beds can be seen running out onto the spoil tips from the level.

**Power**

A wheelpit for the recorded 9x2ft diam. pumping wheel is visible.

**Processing**

An ore bin can still be seen and there is much evidence for manual dressing in the form of fine tailings and sorted crushed rock.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail

**References**

Hall 1993, 87-88

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SN8354

Mine  
(Disused)

CEFN COCH  
PRN 5518

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<b>1100</b>	<b>CEFN-PAWL (Lead)</b>			<b>NGR</b>	SO17107983	SO17NE
<b>District</b>	Radnorshire	<b>Community</b>	Beguildy			404 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Nr.Destroyed	<b>Date</b>	Roman?/19th century	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian Ludlow Series rocks. No evidence of mineralisation

**Workings**

A number of levels are recorded as being present (possibly 3) and aerial photographs show what may be a number of shallow trials and shaft-mounds on the higher slopes on both sides of the stream. All workings are now backfilled.

**Transport**

No evidence

**Power**

No evidence

**Processing**

Manual processing is presumed although there is a lack of evidence on site. Machinery (presumably for processing) is believed to have been present on the site up to the time of the second world war.

**Other features**

There are earthwork remains of a single stone built structure at SO17097985 surviving at foundation level. It is not clear whether this is related to mining or farming activity.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

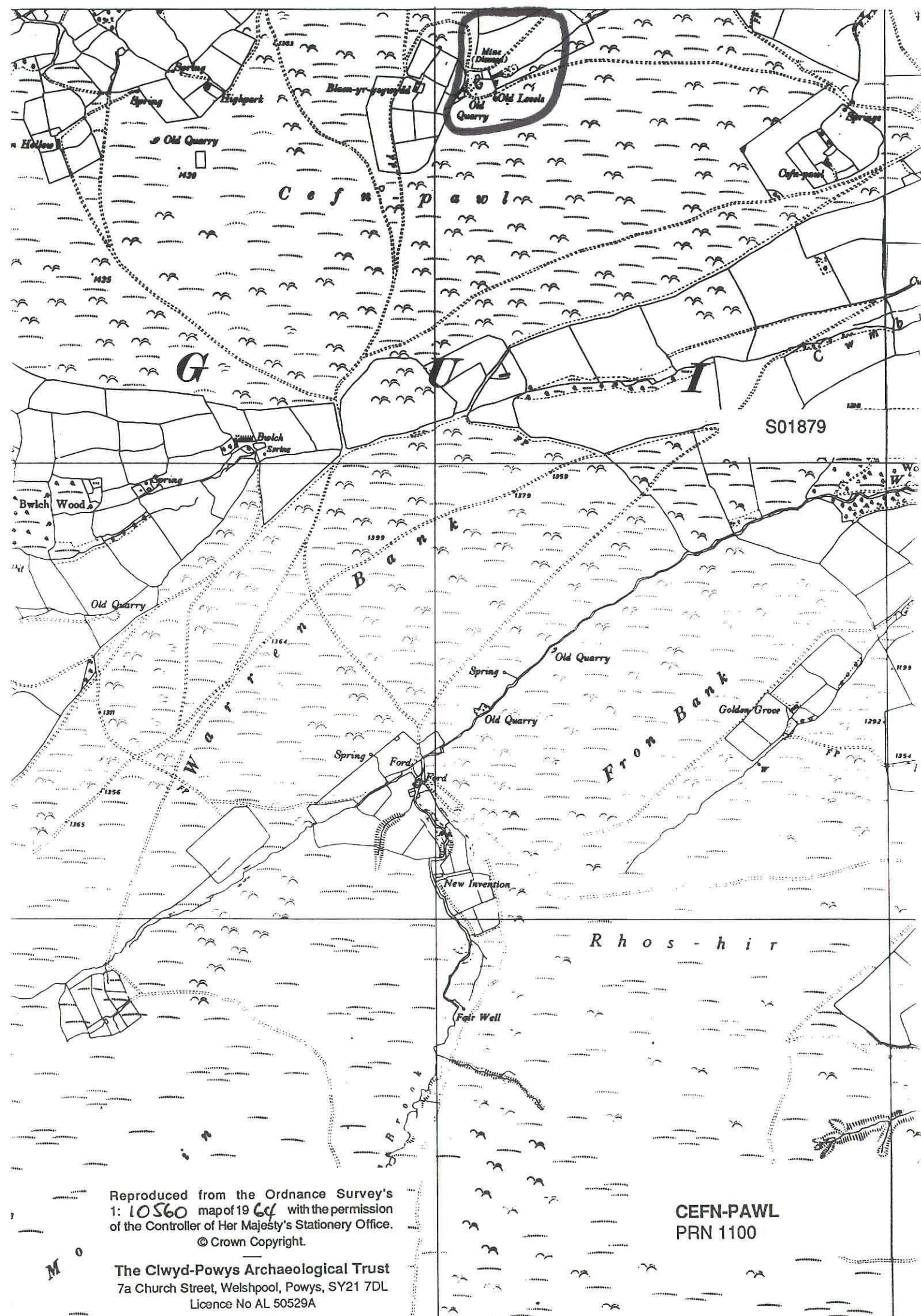
**References**

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**Photographs**

CPAT 92/MB/0067-0069





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CEFN-PAWL  
PRN 1100



<b>8460</b>	<b>CEULAN (Lead)</b>			<b>NGR</b>	<b>SN86209740</b>	<b>SN89NE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			<b>300 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	17th century/1857-1889	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Silurian grits and mudstones. The three main NW/SE lodes consist of the Rhoswydol, Graig goch and Brynfedwen lodes. Three other NW/SE lodes were also exploited within the sett. The vein material is galena mixed with quartz and sphalerite.

**Workings**

Up to 13 levels of varying date are shown on the 1887 25" OS map together with 3 shafts, 2 adits numerous trials and stoping breking to the surface as long linear opencuts. All of these features are visible on the ground but are difficult of access due to dense forestry cover. The main group of workings can be seen on the slopes above Nant Ceulan from SN85159790 to SN85659718.

**Transport**

There are numerous short tramways out onto individual spoil tips and a main line from the northernmost shaft SN85859771 down to the crusher house.

There are a number of inclines to levels on the south-western slopes of Llanerch Yr Aur SN85919778 and the eastern slope of Esgair Geulan SN85839778.

At SN86229733 tramways from an adit south-east of the crusher contour the hillside round to the crusher.

**Power**

Water power was provided from streams descending from Waun Ty Isaf and Llanerch Yr Aur. There was a 40x3.5 ft pumping and crushing waterwheel at SN86409735 plus a 30x3ft pumping waterwheel located close to the present forestry track at SN86439735.

**Processing**

Two crusher houses are visible at SN86139728 and SN86409735. Round buddles were also present at SN86609750 together with an ore bin and washing/picking floor. Three settling tanks can be seen at SN86299736.

**Other features**

A mine office range is present on the dressing floors together with other unclassified buildings which probably represent a smithy, stores and carpenters shop all centred on SN86259733.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried prior to a decision on any proposals involving shaft capping and gating of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

There is some scope for renovation of the pumping wheelpit structure close to the present forestry track and the crusher housing further east where tree growth is eroding wall bonding and will ultimately cause collapse. The Welsh Mines Preservation Trust, and CPAT, in conjunction with the Forestry Authority should be contacted with regard to possible work on these structures.

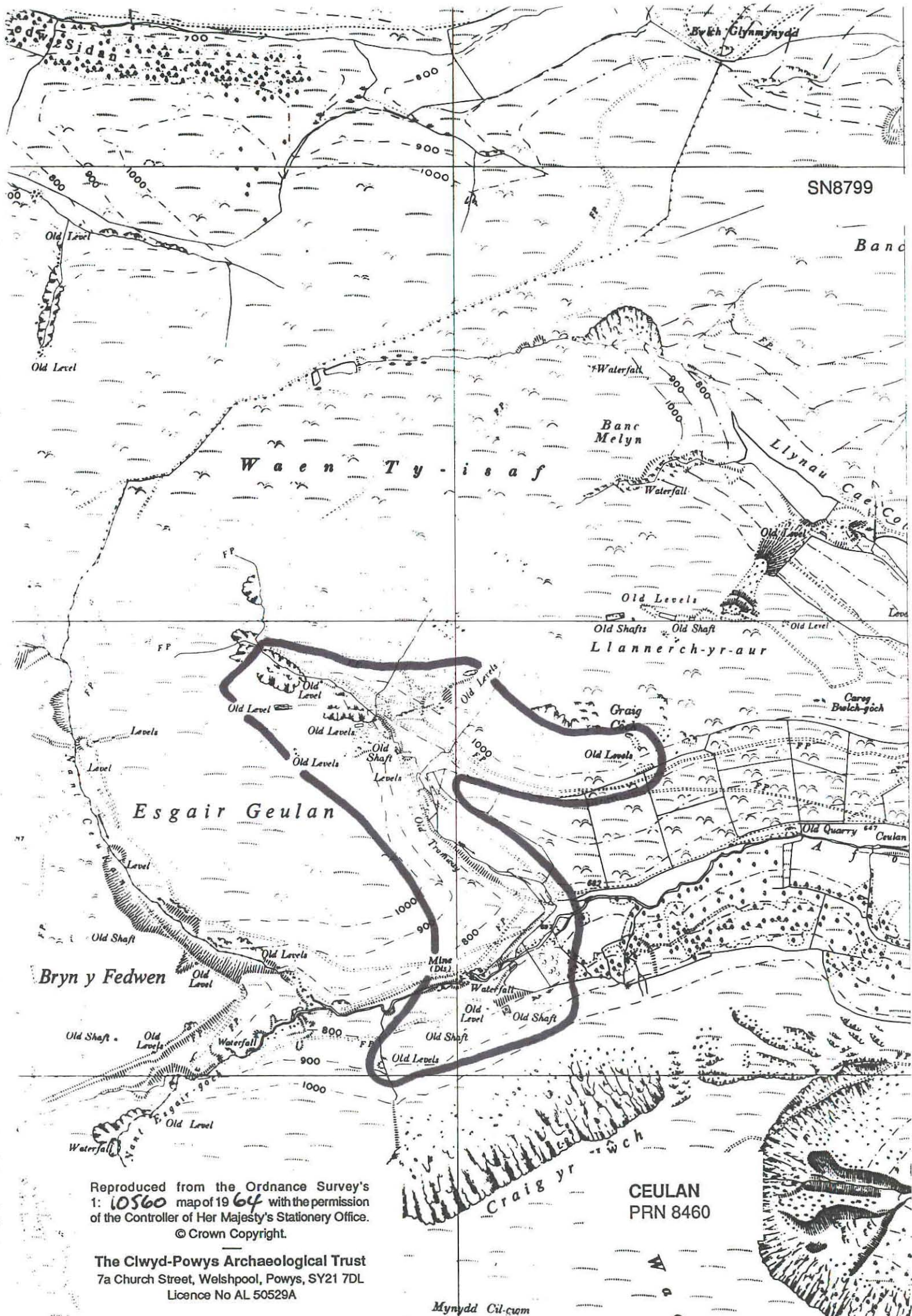
**References**

Bick 1990a, 26  
 Foster-Smith 1978, 16  
 Jones & Moreton 1977, 13  
 Jones 1922, 37, 169  
 Ordnance Survey 1st Edition 25 inch Map  
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**Photographs**

RCAHMMW 92/CS/1626-1627  
 RCAHMMW 925095/51





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CEULAN  
PRN 8460

Mynydd Cil-cwm



<b>8853</b>	<b>CLIFFDALE (Lead/Barytes)</b>		<b>NGR</b>	SO30209763	SO39NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Churchstoke		350 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	1914-1918
<b>Threat</b>	Farming/Tipping	<b>Status</b>	None	<b>Land use</b>	Rough Pasture

**Geology**

Ordovician volcanics of the Stapley formation. The main vein strikes east-west. Mineralisation includes galena, barytes and calcite.

**Workings**

These consist of four shafts which include Weston Shaft SO30009767, Powis Shaft SO30129758, Bower's Shaft SO30209772 and Sump Shaft SO30319782. All of these are now infilled. Sump shaft could not be located with any certainty.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

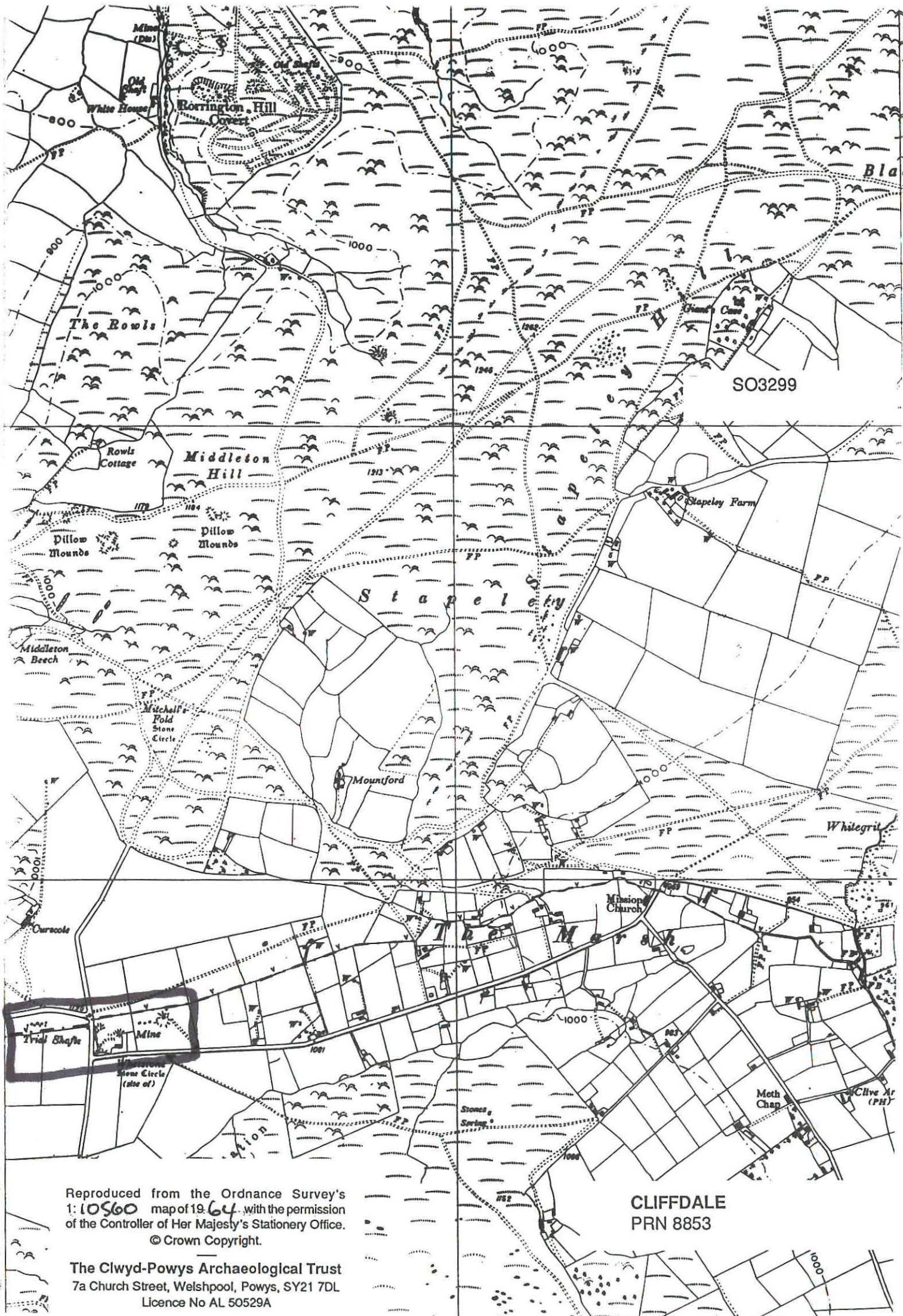
**References**

Foster-Smith 1978, 9

Holding 1992, 30

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CLIFFDALE  
PRN 8853

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<b>18981</b>	<b>CLOCHNANT (Lead)</b>			<b>NGR</b>	SJ04412293	SJ02SW
<b>District</b>	Montgomeryshire	<b>Community</b>	Pen-y-Bont-Fawr			300 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Roman ?/Medieval ?/1850-1880	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry/Pasture	

**Geology**

Ordovician volcanics and slates with numerous mineralised fault zones containing lead and copper ores with quartz and barytes gangue.

**Workings**

There is an engine shaft at SJ04312302. To the north-east are two short trial levels at SJ04452321. To the south of the shaft are two further levels at SJ04412292. The deep adit is run-in and can be seen at SJ04422283.

**Transport**

There are earthwork traces of tramway track beds to be seen outside some of the workings which lead to the spoil heaps.

**Power**

There is a pumping waterwheel pit close to the engine shaft which was driven by water supplied in a leat from Nant Clochnant.

**Processing**

A crusher was brought to the mine in 1880.

There are remains of ore bins and picking/washing floors.

**Other features**

There is a magazine behind Pant Cae Hir farmhouse at SO04832232.

**Artifacts**

There are remains of a cast iron pumping pipe in the top of the shaft.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

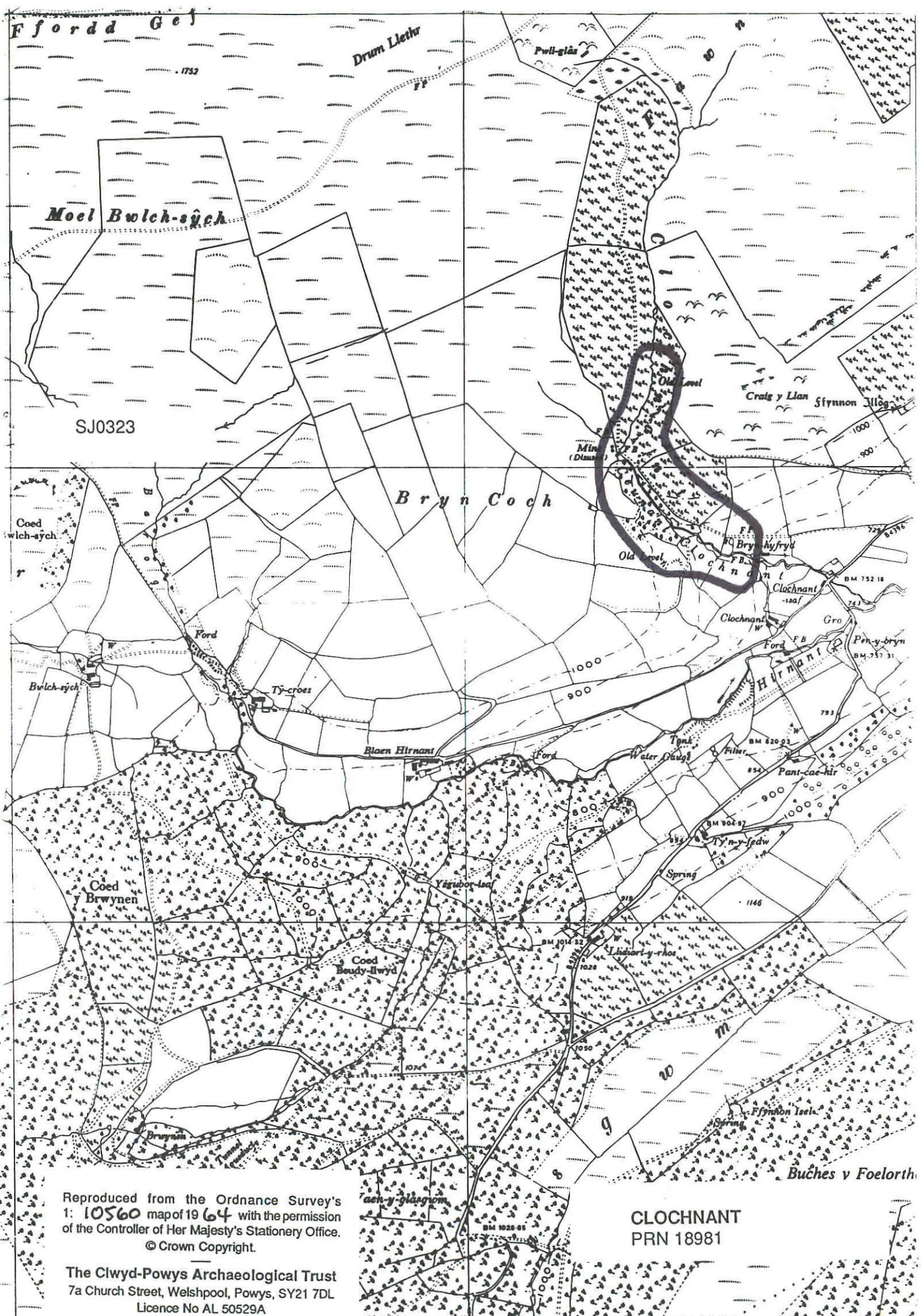
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

**References**

- Bick 1990a, 39-40
- Burt et al 1990, 65
- Foster-Smith 1978, 7
- Jones & Moreton 1977, 16
- Ordnance Survey 1st Edition 25 inch Map VIII(4)
- Regional SMR: Clwyd-Powys Archaeological Trust 1993
- Williams 1985, 103-4
- Wren 1968, 144

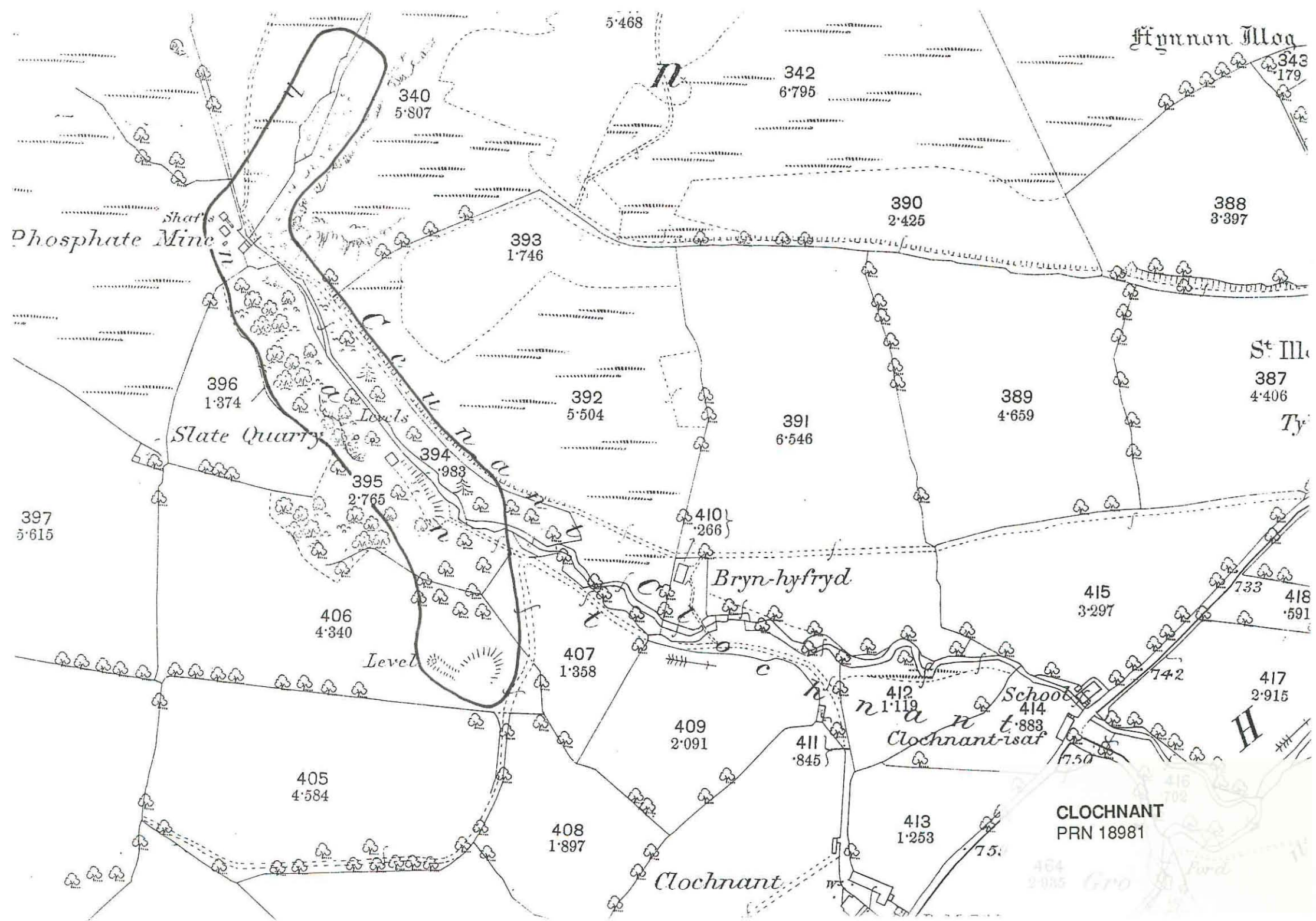




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<b>18982</b>	<b>CRAIG DDU (Lead)</b>			<b>NGR</b>	<b>SJ06152395</b>	<b>SJ02SE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Pen-y-Bont-Fawr			<b>280 mOD</b>
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1711-1899	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Ordovician volcanics, shales and slates with galena, pyrite and barytes mineralisation. The main lode strikes ENE-WSW.

**Workings**

There are three levels and a shaft visible within the afforested area.

The upper tip forms an impressive feature of the landscape and the level is still open.

**Transport**

There are earthwork traces of tramway track beds out of the shafts.

There is evidence of inclines between the levels.

**Power**

No evidence.

**Processing**

There are ore washing bins and picking tables by the upper level.

Other poorly preserved building traces could be discerned close to the shaft but are not easily interpreted.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

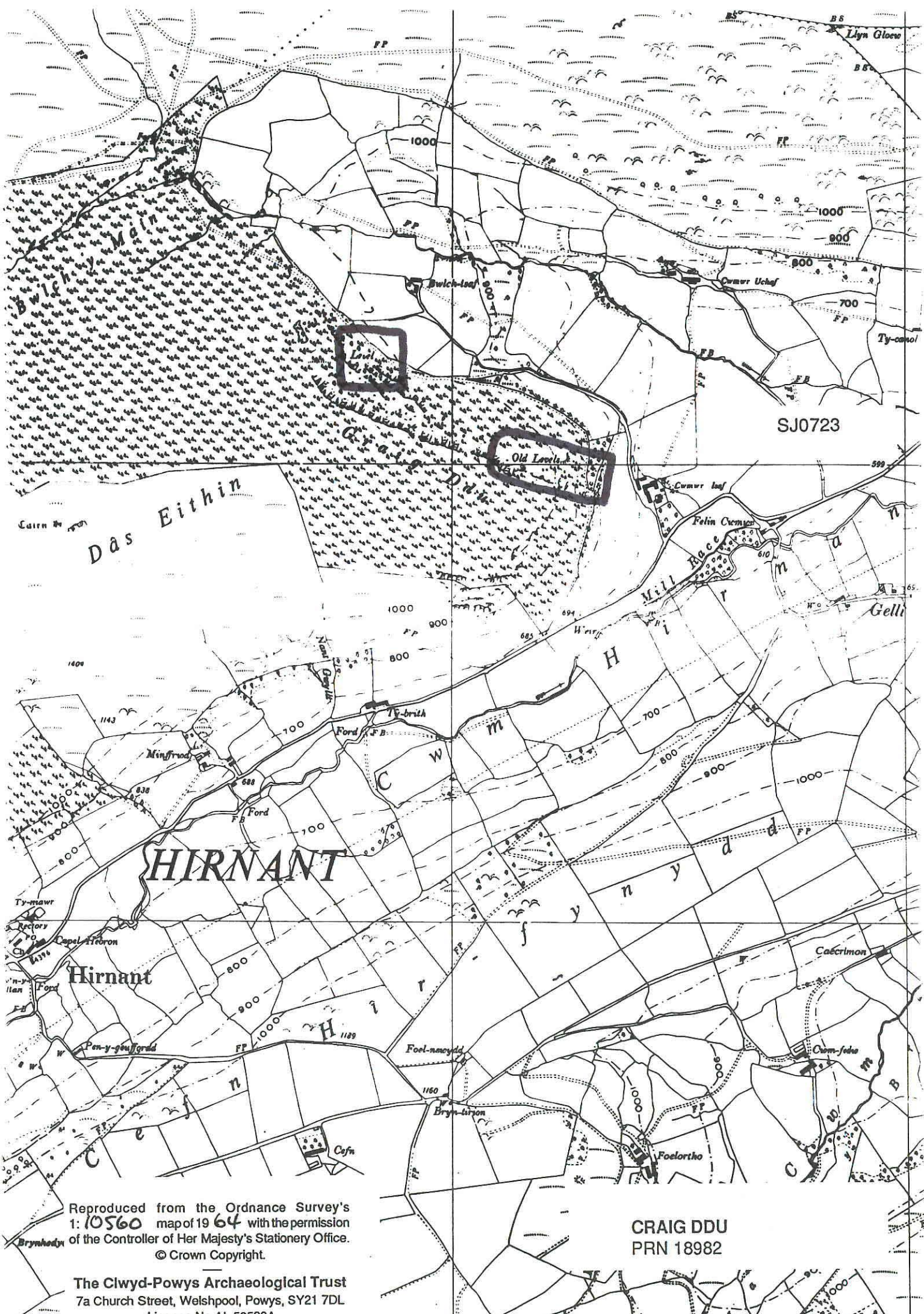
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

**References**

- Bick 1990a, 39
- Burt et al 1990, 53
- Foster-Smith 1978, 7
- Ordnance Survey 1st Edition 25 inch Map V(9)
- Regional SMR: Clwyd-Powys Archaeological Trust 1993
- Williams 1985, 102
- Wren 1968, 144





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CRAIG DDU  
PRN 18982



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36  
5-888

33  
7-196

5-72  
Stepping Sto  
F.B.

39

40

44  
5-331

Levels

41  
858

Strace

Cwmwr-isaf

43  
39

107  
10-215

105  
3-269

Well

655  
B.M. 658.2

104  
2-81  
Raece

112  
Ford  
B

109  
4-929

108  
883

666

685

694

110  
3-348

Weir

CRAIG DDU  
PRN 18982

III  
6-002

113  
5-576



<b>8430</b>	<b>CRAIG RHIWARTH/NORTH LLANGYNOG (Lead/Zinc/Copper)</b>			<b>NGR</b>	SJ05552656	SJ02NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangynog			350 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Mid 1840s-1883	
<b>Threat</b>	Housing development	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician Llangynog formation volcanics and metamorphic rocks. The main lode strikes E-W with zinc, chalcopyrite and galena mineralisation.

**Workings**

There are 5 former level entrances centred on SJ05422635 with stoping to the surface visible close to the upper portion of the slate quarry incline SJ05432649. A deep adit was entered close to Ty'n Y Twll cottage SJ05262635 and an infilled shaft can be seen south of the slate quarry magazine SJ05382659.

In Cwm Glanhafon east of Craig Rhiwarth SJ06602730 there are three trial levels for lead which date to between 1751 and 1899 as well as remains of undated slate workings close to the public footpath.

**Transport**

There were presumably inclines to the shaft and levels but no remains could be seen. It is possible that the slate incline used an existing mine incline which communicated with lateral tramways contouring the hillside to the workings.

**Power**

A leat from the Afon Eirrh supplied water to a wheelpit on the dressing floors but has since been largely destroyed by housing development and road construction.

**Processing**

The dressing floors were nearly totally destroyed by building and the 1977 B4391 road improvements. The only survival is a portion of the wheelpit which is built into a modern dwelling.

The building foundations visible at SJ05612636, consist of large masonry blocks and beams and overall the structure seems too substantial to be related to the nearby farm buildings at Tan Y Graig though their precise function and relationship with the mine, if any, are not clear. The structure may be related to the slate quarrying activity to the north.

There is also a cog wheel discarded on the hillside at SJ05502642 although this has probably travelled from the slate quarry.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and the gating of levels.

**References**

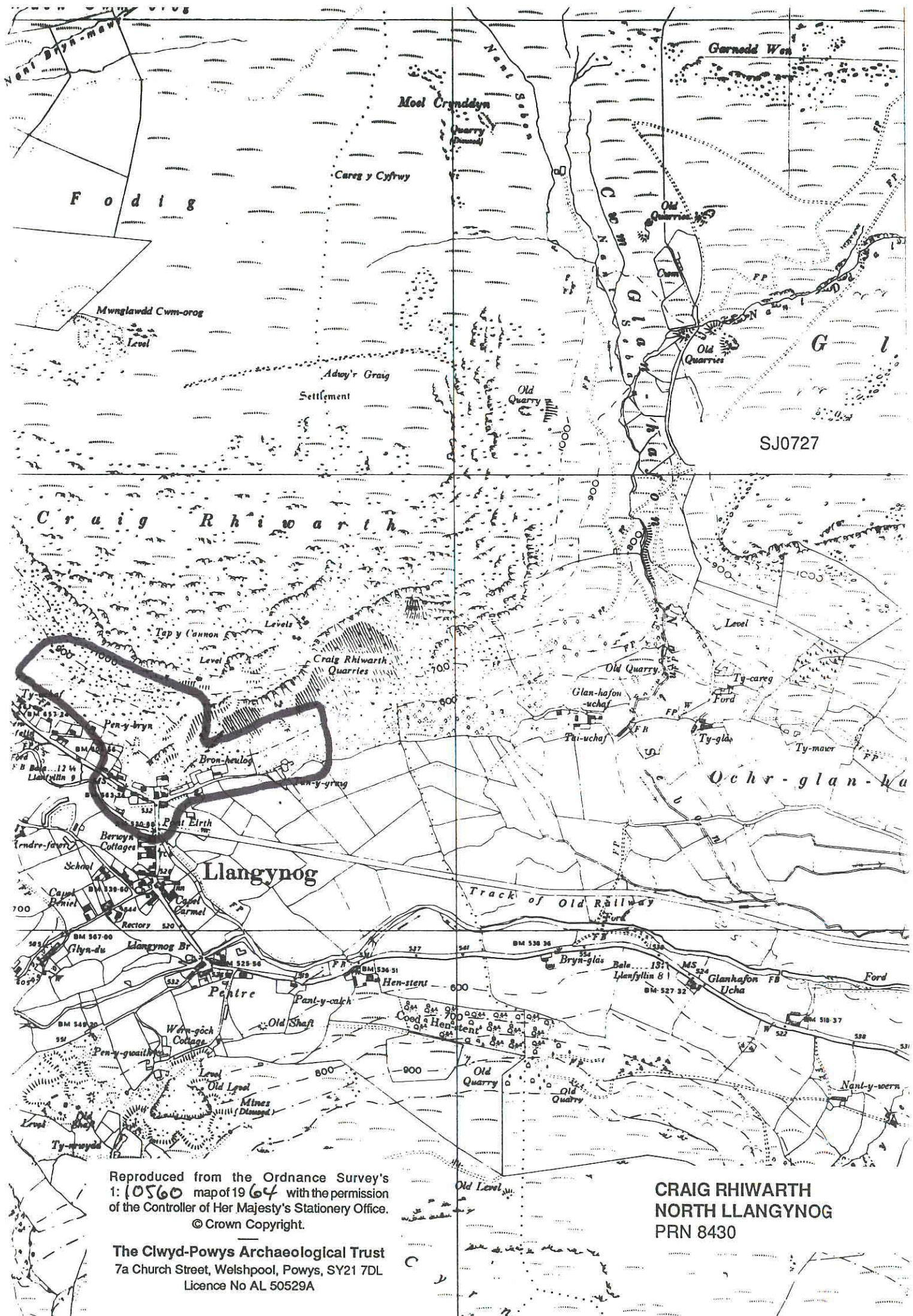
Bick 1990a, 32-34  
 Foster-Smith 1978, 1  
 Ordnance Survey 1st Edition 25 inch Map IV(12)  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993  
 Williams 1985, 89-94  
 Wren 1968, 133-5

**Photographs**

CPAT CS92/14/34-36  
 RCAHMMW 935098/59-62,65-68

RCAHMMW 935097/55



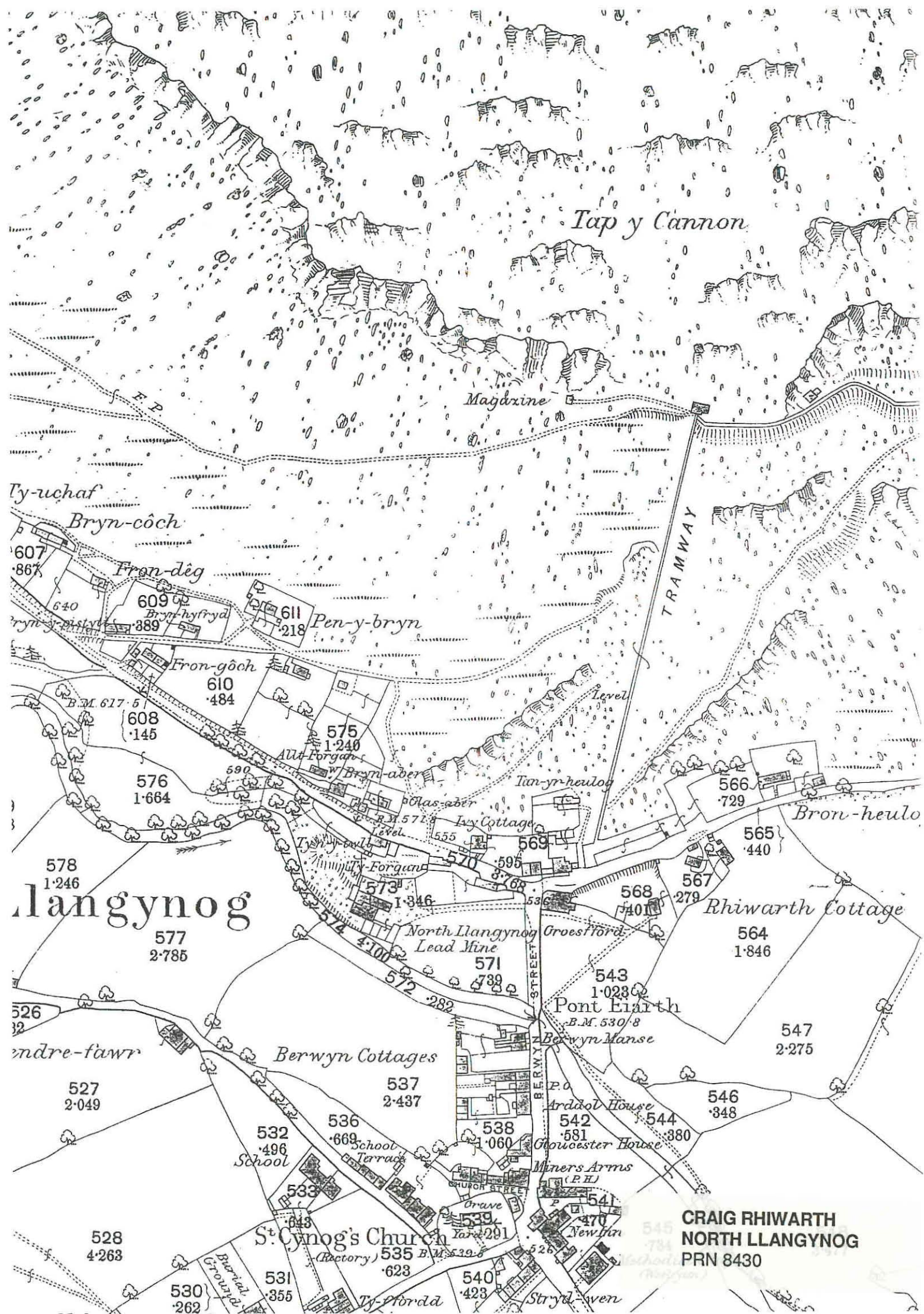


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CRAIG RHIWARTH  
NORTH LLANGYNOG  
PRN 8430







<b>8438</b>	<b>CRAIG-Y-MWYN (Lead)</b>			<b>NGR</b>	SJ07422852	SJ02NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanrhaeadr-ym-Mochnant			300 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Roman ?/17th century/18th/1845-1880	
<b>Threat</b>	Farming	<b>Status</b>	none	<b>Land use</b>	Pasture	

### Geology

Ordovician Llangynog formation shales, slates and tuffs. There are 2 ENE-WSW veins & 2 E-W veins. Mineralisation includes galena and sphalerite in a dominantly calcite, quartz and barytes gangue.

### Workings

There are extensive hushing earthworks on top of the hill SJ07472848 with 2 semi-circular dams close to the rim of the main opencast and numerous leats contouring the hillside from a bog source and exiting into the quarry like opencast. 'Miners Pools' are indicated on a plan of 1855 and are almost certainly other hushing dams or water collection ponds. The latter are now lost in an extremely wet boggy area at SJ07562810 and only one was recorded on the brief site visit. Aerial photographs show three small rectangular pools with associated leats which appear to exit into the quarry opencast at a more easterly location.

There are a number of linear trial trenches on top of the hill north-west of the opencast at SJ07202870. There are eight visible levels, a shaft to the south of the opencast on top of the hill at SJ07352830, a deep adit to the east below the opencast, some open stoping within the opencast itself and numerous shallow trials around the rim of the opencast. Below the opencast the hushing activity has formed a very large fan of debris which extends all the way to the dressing floors.

### Transport

There is a tramway running from the No.1 level to the bottom of the opencast. A steep incline runs downhill from just east of the No.4 level to the dressing floors SJ07632860. On the 1885 plan of the mine a trough like ore chute was in use in the same position as the later incline. The incline has been cut through by a recent farm track revealing a section of its construction.

### Power

A leat at SJ07712885 contours the base of the hillside to the north of the dressing floors and runs south into a storage reservoir for powering processing machinery at SJ07762879. The leat was fed by the Afon Disgynfa and Nant Y Gaseg. There are at least 4 leats on top of the hill feeding the hushing dams. The leats originate from bog sources at SJ07402817 & SJ07372857.

A 30x4 ft diameter waterwheel drove the crushers.

An incline winding house is situated at the head of the incline SJ07602861 with remains of the iron fixing bolts for the winding gear in situ. Part of a four foot diameter cast iron wheel, probably belonging to the winding wheel, can be seen alongside the incline trackway.

### Processing

A stone breaker and crusher were situated close to the reservoir at the base of the incline at SJ07732878. The crusher house wheelpit and crusher housing survive. Stone platforms and walls to the south of the crusher probably represent the bases of a picking table and jigger bases. Round buddies and ore bins were also present but are not now identifiable on the ground.

### Other features

There is a magazine above the dressing floor reservoir at SJ07752880. There is a possible small mine office/smithy at the entrance to the smithy level. Workshops are situated to the SE of the dressing floors with stables and miners' cottages further to the east.

At the western extreme of the opencast there is a rectangular building divided into a number of rooms which may relate to the eighteenth century activity at the mine. The building survives at foundation level only at SJ07432853.

Another rectangular building with southern and eastern square room extensions can be seen 100 yards to the south of the opencast alongside the present trackway at SJ07452834. This structure may have agricultural origins rather than an association with the mine.

### Recommendations

The hushing remains are unique in Powys and are potentially of very early date. These earthworks also form one of the most extensive hushing systems in Wales and should be preserved. These features are rare and nationally important and should be recommended for scheduling as ancient monuments and managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.



Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

A detailed measured surface survey of the surviving structural and earthwork features of the hushing activity is recommended.

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#### **References**

Bick 1990a, 36-38

Foster-Smith 1978, 4

Lewis 1964

Ordnance Survey 1st Edition 25 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993

Williams 1985, 75-89

#### **Photographs**

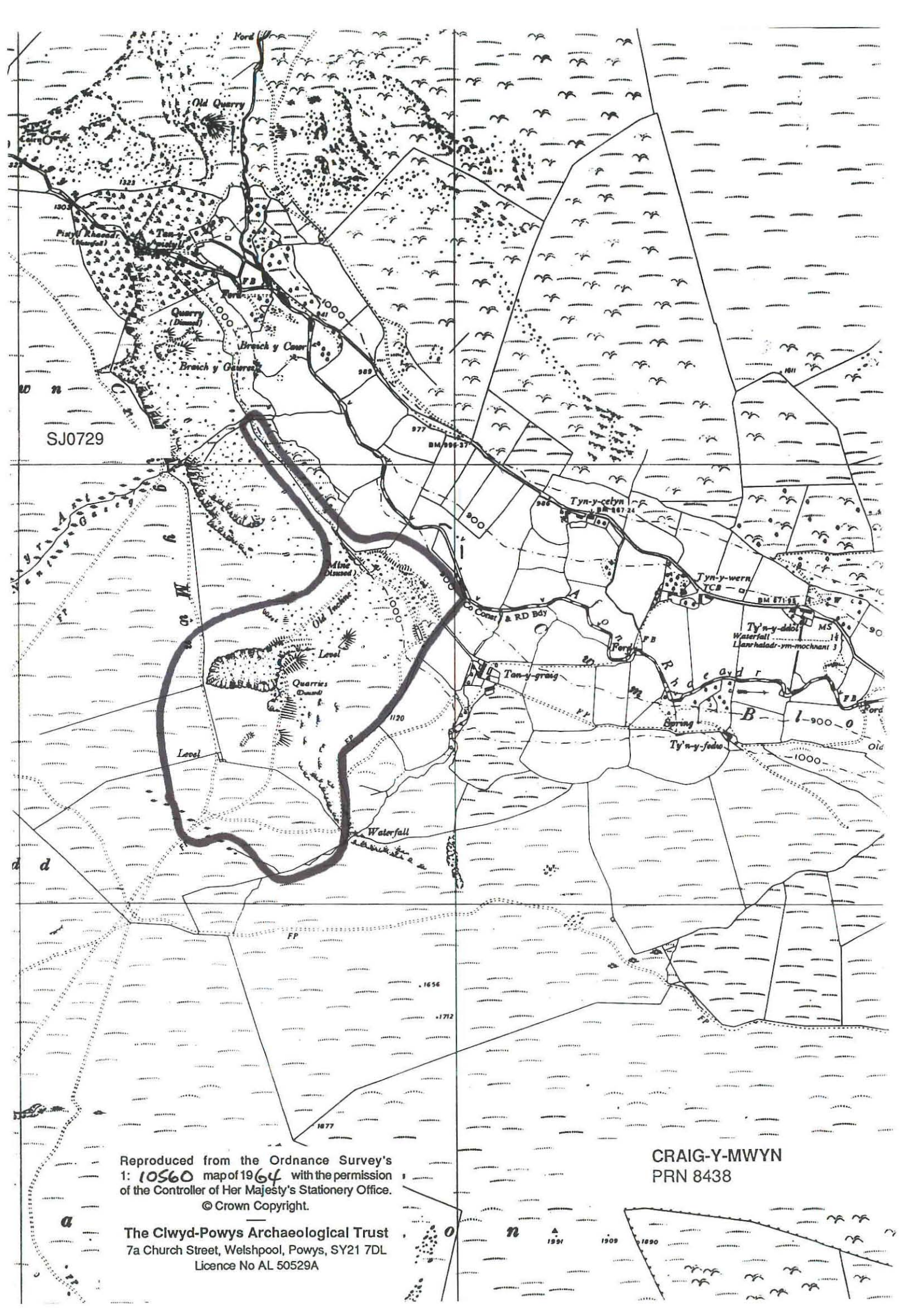
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RCAHMMW 935097/50-54

CPAT CS92/09/01-12





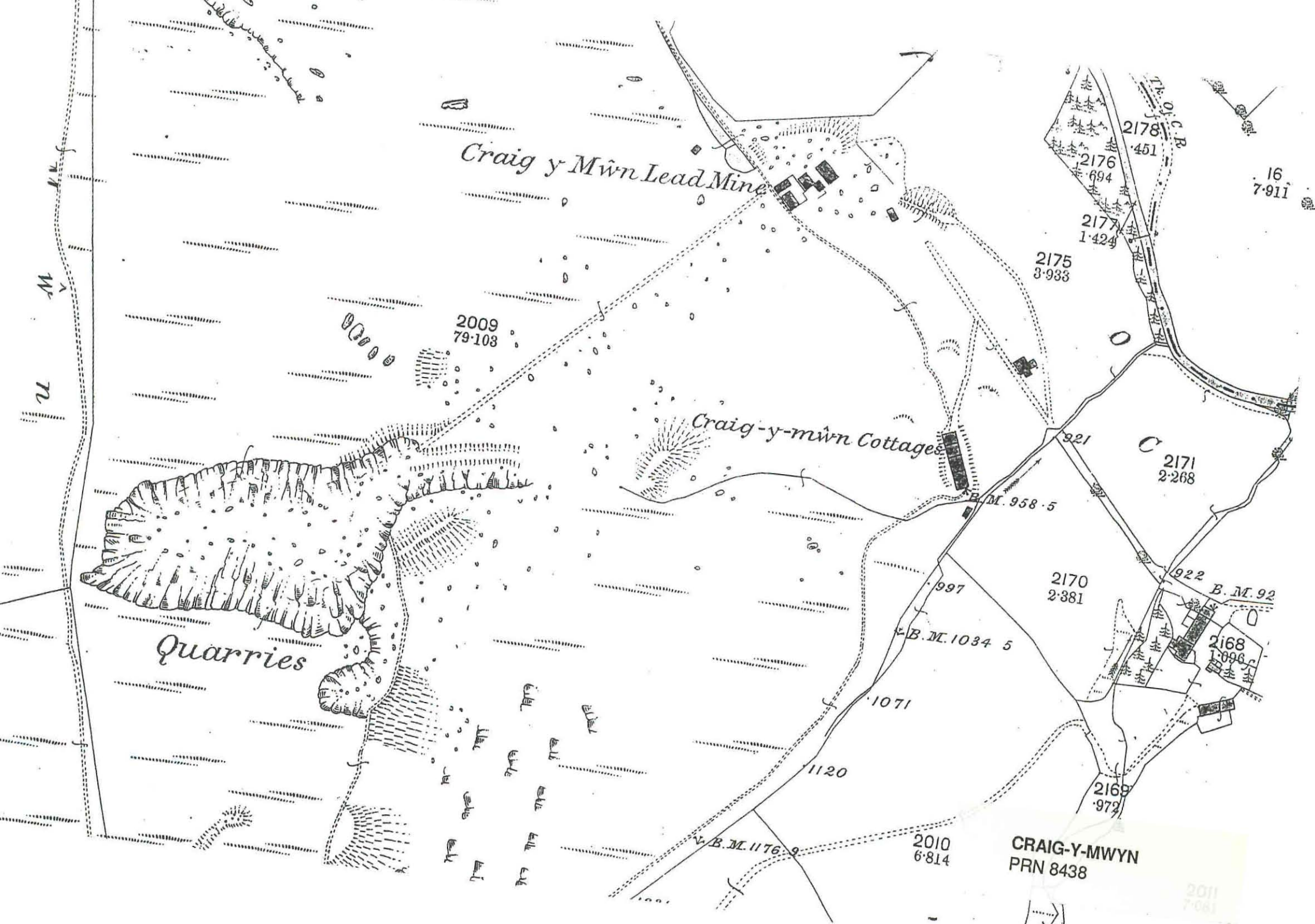
SJ0729

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CRAIG-Y-MWYN  
PRN 8438





*Craig y Mwyn Lead Mine*

*Craig-y-mwyn Cottages*

*Quarries*

**CRAIG-Y-MWYN**  
PRN 8438



<b>18983</b>	<b>CWM BACH (Lead trials)</b>			<b>NGR</b>	SN94406980	SN96NW
<b>District</b>	Radnorshire	<b>Community</b>	Rhayader			450 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1877/1887+	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

A single ENE striking lead lode can be seen crossing the Esgair Dderw ridge in rocks of Silurian age. Mineralisation includes galena and calcite.

**Workings**

The workings consist of numerous opencut trials which all appear to be of an early date while the nineteenth century revival of interest is evidenced by three levels on the NE termination of the lode close to the Cwm Coch Plantation SN94707013 & SN94909509 (marked as old quarries on the OS Map)

**Transport**

There is some survival of earthwork tramway beds out of the 19th century levels onto the spoil heaps.

**Power**

No evidence.

**Processing**

Manual dressing is evidenced by sorted rock fragments on the spoil heaps.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

Aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

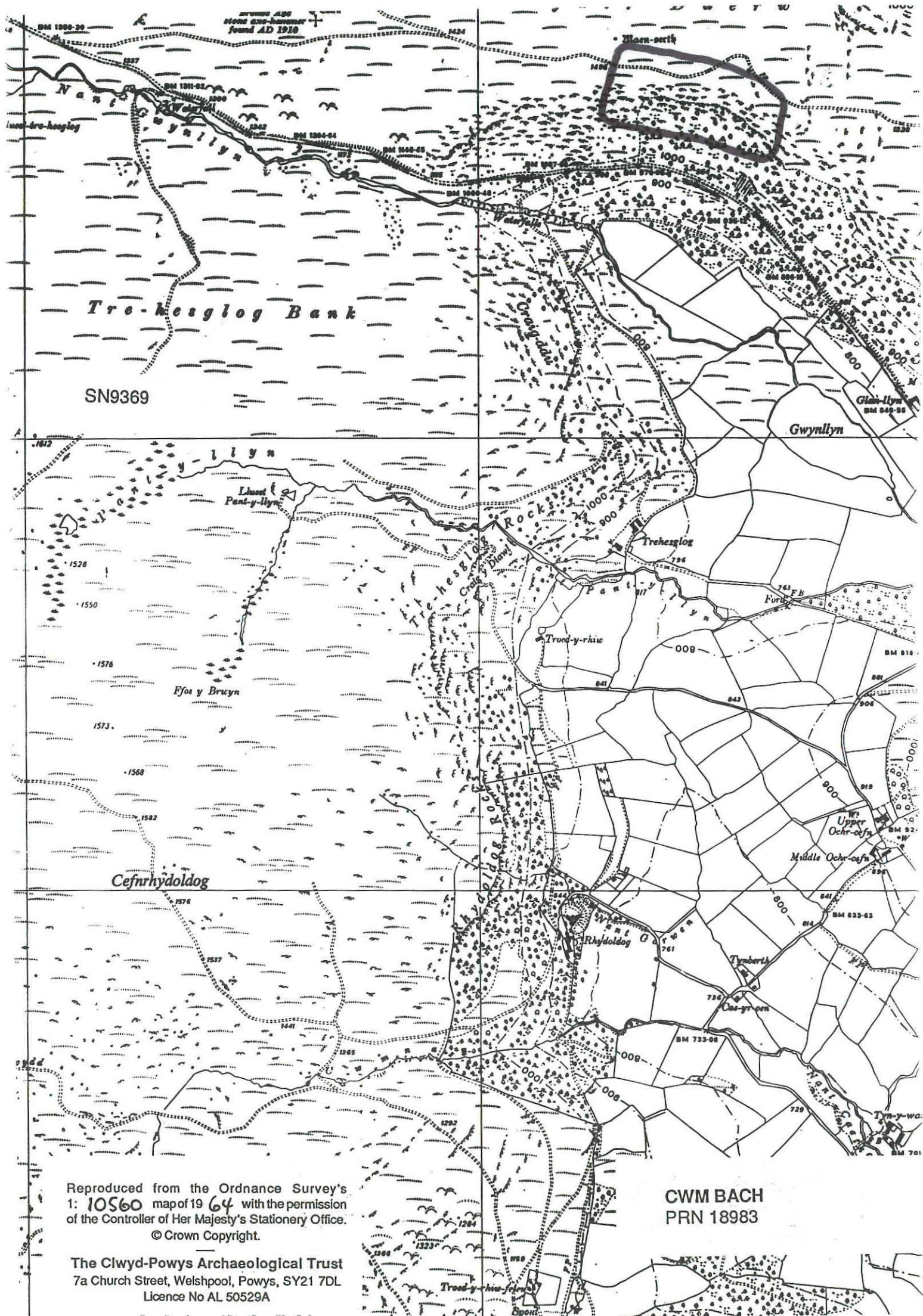
Bick 1991a, 60-61

Hall 1993, 79

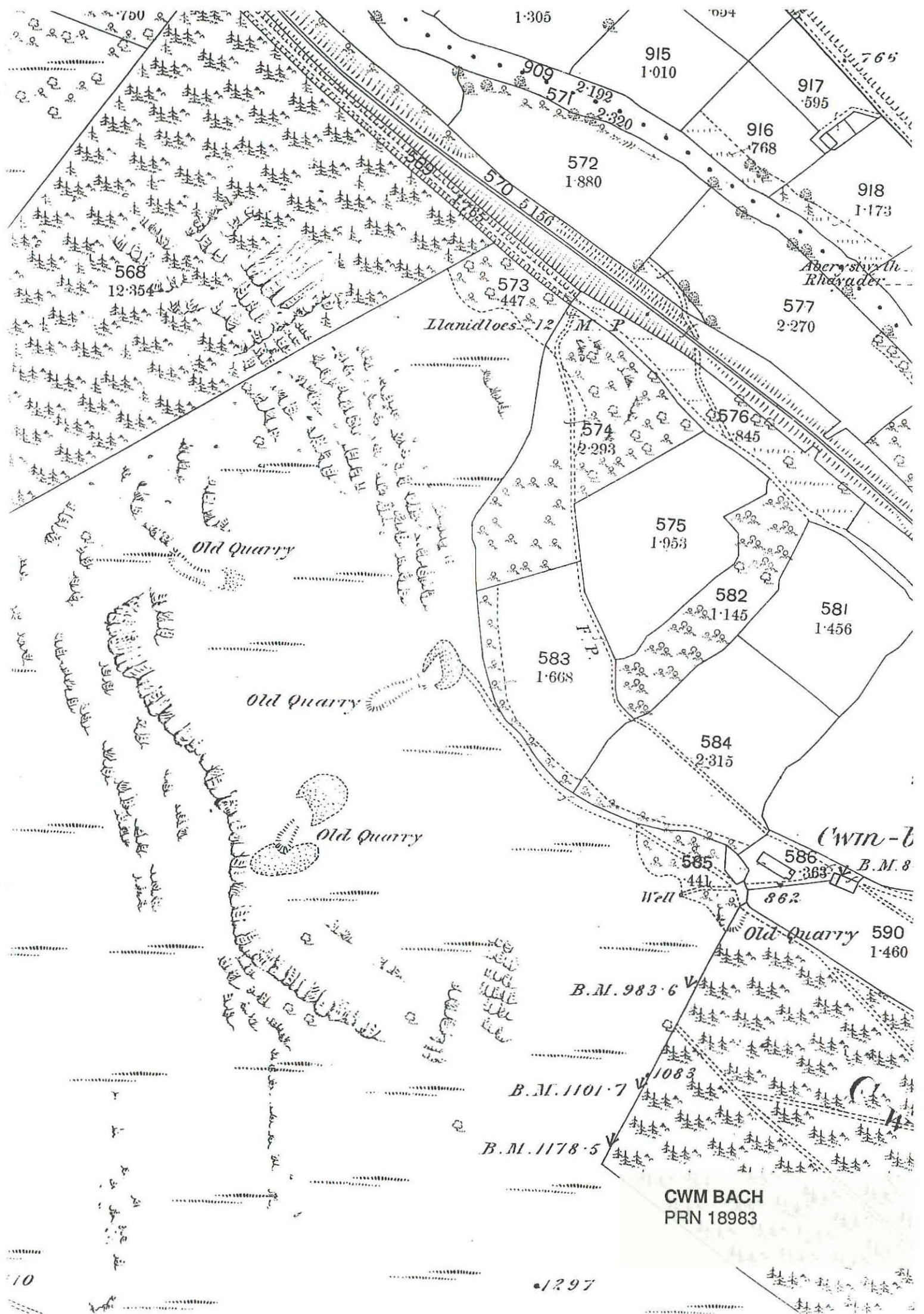
Ordnance Survey 1st Edition 25 inch Map XIV(8)

Regional SMR: Clwyd-Powys Archaeological Trust 1993











<b>5945</b>	<b>CWM ELAN (Lead/Zinc)</b>			<b>NGR</b>	SN90006510	SN96NW
<b>District</b>	Radnorshire	<b>Community</b>	Rhayader			320 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1796-1877	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

### Geology

There are at least two lodes striking east-west in Silurian Llandoveryian rocks with galena and zinc mineralisation.

### Workings

These consist of two shafts, two or three levels and two adits which belong to the later workings. Both of the shafts are open. A level has been driven westwards in the rock face above the westernmost shaft. The other level on the south side of the stream is blocked.

The earliest workings appear to have worked outcropping vein material on the northern side of the stream which runs past the dressing floors and consist of shallow openworkings and blocked levels. There are some dry channels running down the slope from west to east and passing through the early workings which are reminiscent of prospect hushing channels though they may have been created by the rupturing of leats contouring the slopes from north to south.

### Transport

There are earthwork traces of tramway beds leading from the southern level out onto the small tip while others can be discerned running out of the main engine shaft onto the tips.

There are two leats contouring the valley slopes from north to south which supply water from Nant Mechan to the dressing floors. The stream which runs past the dressing floors also supplied water to the mine. These features are however dwarfed by the engineering feat of cutting a nine mile leat course from Llyn Cerrigllwydion Isaf (SN 844700) to the Cwm Elan Mine in 1876. This work took only three months to complete and the complete course of the leat can still be traced.

### Power

There are three wheelpits on the dressing floors. The largest of these pumped the engine shaft and measured 36x4ft. The crusher house wheel drove two crushing rolls and a Blake's stonebreaker. Below the crusher house wheelpit is a smaller wheel pit which presumably powered the buddle.

### Processing

A large crusher house housed two sets of crushing rolls. The large rolls support beams still survive propped up against the wall. The water wheel axle survives and is situated in the crusher room.

There is a single round buddle with surviving wooden basal frame struts and a covered leat exiting to the east.

There are numerous low stone-lined platforms to the north of the buddle which probably represent jigger platforms. There is a large tailings tip to the north of these platforms.

There are two surviving ore bins below the engine shaft with the possibility of a third damaged example adjacent to these.

There are numerous earthwork platforms running down the slope alongside the stream which are associated with small areas of manual ore dressing. These probably date to the earliest phase of working in the eighteenth century.

### Other features

There is a mine office/ store building north of the jigger tailings which has two rooms.

To the east of this building is a house which may be the main mine administration building. Immediately east of this is another house of more recent construction which appears to be an unfinished dwelling.

Below the southern level at the western extreme of the mine site is a small single roomed building which may have been the magazine.

### Artifacts

There is much ironwork remaining on the site associated with the pumping of the engine shaft including pumping rods and supports at the pumping wheelpit and at the top of the balance pit and shaft. The pumping beam still lies in situ in the top of the shaft.



There is an iron waterwheel axle in the crusher room.

---

**Recommendations**

All of the main features of this mine are well preserved, particularly the crusher house, pumping wheelpit, mine offices, magazine, buddle, jigger platforms, leats, and the potentially eighteenth century earthworks. These features should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance .

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

A detailed measured surface survey of surviving earthworks and structural remains is recommended.

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**References**

Bick 1991a, 21-22

Hall 1993, 80-81

Regional SMR: Clwyd-Powys Archaeological Trust 1993







**5925 CWM OROG (Lead/Zinc/Barytes)****NGR**

SJ052273

SJ02NE

<b>District</b>	Montgomeryshire	<b>Community</b>	Llangynog			400 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Prehistoric ?/Roman ?/Medieval ?/1747-1909	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician slates, shales and felsites dominate the geology. There is a main ENE-WSW vein with N/S barytes cross-courses. Mineralisation of the main vein includes lead and zinc.

**Workings**

'Old Workings' were described as being present in 1747. Opencuts and stopes can be seen on the northern slopes of Craig Rhiwarth on the barytes lode & main lode.

There are 10 levels in all including adits below the northern scarp of Craig Rhiwarth from SJ05022727 to SJ05272728. There is a single shaft at the top of the hill SJ05272728. Surface workings are visible at the western extent of Pencraig and probably represent early trials for the western extent of the lode SJ04832681.

**Transport**

There is a 3 phase system which is unique in the Mid Wales orefield including: (1) 2 contour tramways connecting to long oreslides (2) 1 incline tramway (3) An aerial ropeway.

The three contour tramways are well preserved as are the ore chutes at their extremes. Only the upper foundation base of the aerial ropeway winder survives. The incline survives as a footpath.

Many of the adits display earthwork traces of tramway beds. At the uppermost level entrance remains of rails can be seen.

**Power**

Two leats from Nant Bryn Mawr lead to the dressing floors. There is a 17 x 2ft wheelpit on the dressing floor with an in situ axle. This waterwheel drove the crusher and buddle.

**Processing**

There is a crusher house, stone breaker platform, three earthwork settling tanks, a single buddle and a jigger shed all centred on SJ04732736. The ore chutes/bins at the head of each contour tramway are in direct association with washing/picking floors. Each of the ore bins is constructed to a slightly different design.

**Other features**

No evidence.

**Artifacts**

Crusher wheel axle still within building

**Recommendations**

The contour tramway system of moving ore from the upper workings to the dressing floors via oreslides is well preserved, unique to the orefield and nationally important. It is therefore strongly recommended that this whole mine site should be protected by scheduling backed up by a management scheme that includes plans for appropriate consolidation work and subsequent regular maintenance of the standing structures.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and the blocking of levels.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

**References**

Bick 1990a, 34-36  
Foster-Smith 1978, 3



Lewis 1964

Ordnance Survey 1st Edition 25 inch Map IV(8)

Williams 1985, 94

Wren 1968, 131-8

**Photographs**

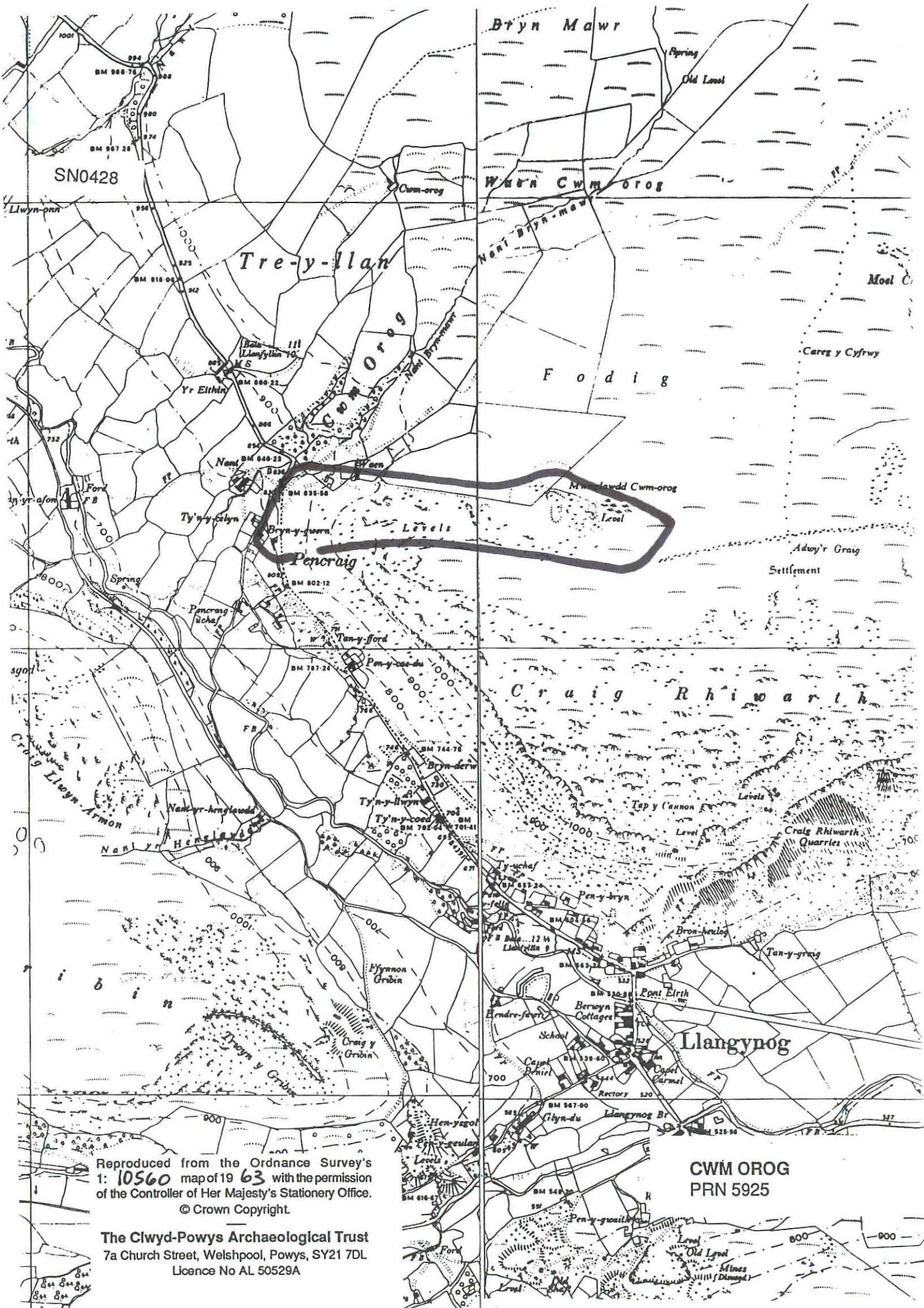
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CPAT 151.00-18

CPAT CS92/17/01-34

RCAHWW 935098/63-64,69-70





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CWM OROG  
PRN 5925



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11-686

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1026  
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1024  
4-712

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1021  
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7-19

1018  
2-80

1019  
2-81

992

Waen

B.M. 973-3

B.M. 929-1

B.M. 882-6

910

B.M. 1018-0

B.M. 1059-4

B.M. 1111-7

B.M. 1157-4

B.M. 1202-5

B.M. 1249-0

B.M. 1293-3

1332

B.M. 1363-6

1402

1088

1037

T R A M W A Y

Lead Mine  
(Disused)

Old Kiln

Milltir-gerig

ern

Pencraig

17-80

CWM OROG  
PRN 5925



<b>18969</b>	<b>CWM-FRON/EAST CWM-FRON (Lead)</b>			<b>NGR</b>	<b>SN971809</b>	<b>SN98SE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			<b>250 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Nr.Destroyed	<b>Date</b>	1864-1897	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Rough pasture/woodland	

**Geology**

Siluran Llandovery series shales and slates with a single east-west vein containing galena and sphalerite mineralisation

**Workings**

There are three levels and three shafts including

the Magazine level at SN97118099, the adit level at SN97088098, the Pumping shaft at SN97018098, Old shaft at SN96828098, a blocked upper level at SN96908098 and an eastern trial shaft at SN97878089. The adit and magazine levels are still open but partially waterlogged.

**Transport**

No evidence

**Power**

Poorly preserved remains of the pumping, drawing and crushing engine can be seen on the dressing floors at SN97108092. This was a 26" or 28" rotary steam engine which was installed in 1868.

A waterwheel can be seen on the 1886 OS first edition map just below the present road. Only a few poor masonry remains can now be seen.

There are no remains to be seen at East Cwm-fron where a 30ft diam. waterwheel was drawing and pumping.

**Processing**

A full processing setup was present on the main dressing floors consisting of at least one crusher, jigs and buddles.

Except for a masonry and brick construction wheelpit which still displays a number of tie rods close to the stream there is little else to see on the surface. There is clearly much potential for buried archaeology at this site.

**Other features**

A carpenter's shop, smithy, storeroom and office were present in 1868.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

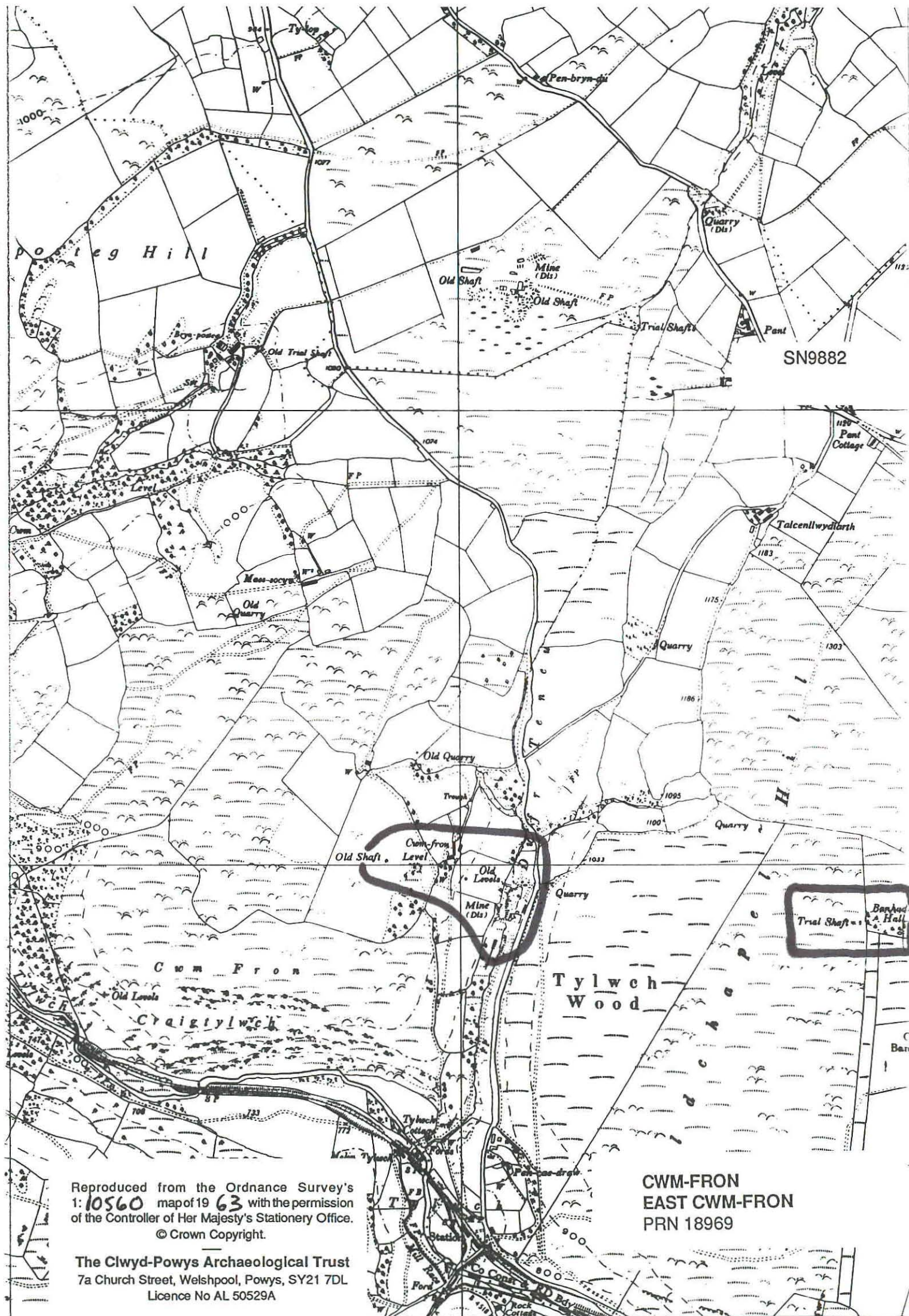
**References**

Bick 1990

**Photographs**

CPAT 142.14,17-18





SN9882

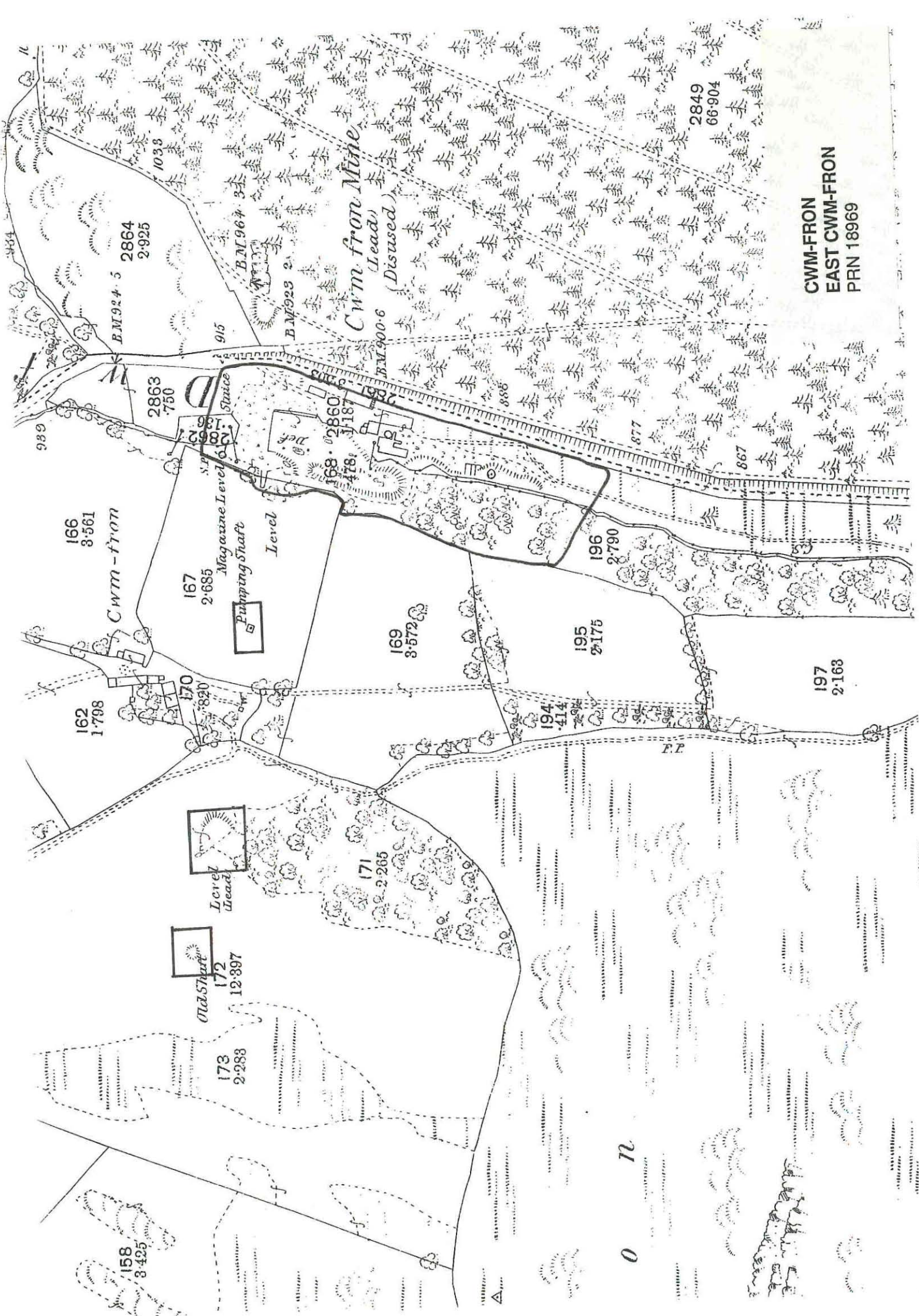
Trial Shaft  
Barbed Hall

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CWM-FRON  
EAST CWM-FRON  
PRN 18969







<b>8448</b>	<b>CWMBYCHAN (Lead)</b>			<b>NGR</b>	SH85850110	SH80SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Glantwymyn			230 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Pre 1868-1875	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian, Upper Llandovery formation. There are 4 E-W lodes of lead ore. Mineralisation includes galena

**Workings**

Workings include five levels, an adit and numerous linear and pit trials on the hillside north of the dressing floors.

There is a shaft at the base of Ffridd Cwmbychan hill which is ventilated by two air shafts to the north-east SN86000011.

An isolated level to the south of the mine on the southern facing slopes of Mynydd Ty'r Sais can be seen at SN85490038 with a trial shaft 500m to the east.

**Transport**

There is a short length of former tram track from the level at SH85820115 to 2 ore bins and an associated short incline to a trial shaft to the east.

**Power**

The power source for the largely destroyed dressing floors was probably the Nant Ty'r Sais. A single wheelpit is shown on the 1886 1st edition 25" map. From its position this probably facilitated pumping at the main shaft as well as crushing.

Two small reservoirs are shown on the 1886 map at SN85800115 and SN85820120 which provided water for the dressing floors.

**Processing**

2 ore bins are visible in association with a hand picking/washing area at SH85820115.

The dressing floors to the south are overgrown and largely destroyed by a trackway through the site. The only visible walls belong to a partitioned rectangular structure with mortared masonry south of the present trackway which conforms to the position of the crusher house on the 1886 map SN85850190, and three E-W parallel walls in the north cutting of the trackway itself SN85850115. The 1886 map further shows two round buddles with an associated wheelpit, slime pits and ore bins south and west of the shaft.

**Other features**

A large deposit of slag and half smelted lead ore was recorded in 1872 and attributed to the Roman period. This has not yet been relocated.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

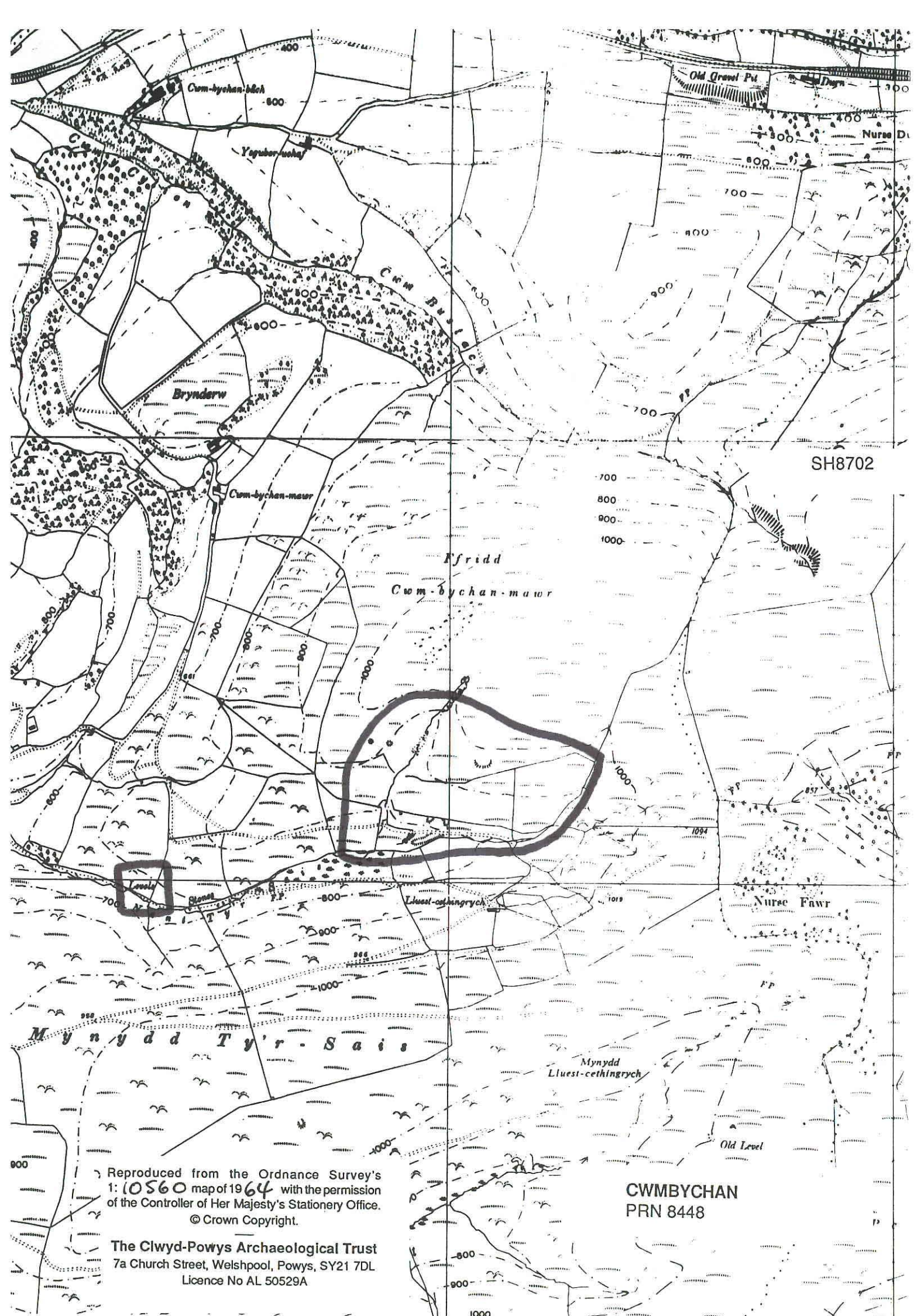
**References**

Bick 1990a, 28  
 Bick 1990b, 33-34  
 Bick 1991a, 25-27  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT 162.00-36  
 RCAHMMW 92/CS/1602-1607  
 RCAHMMW 925093/44-46  
 RCAHMMW 925094/53,55  
 RCAHMMW 925095/41,44-46



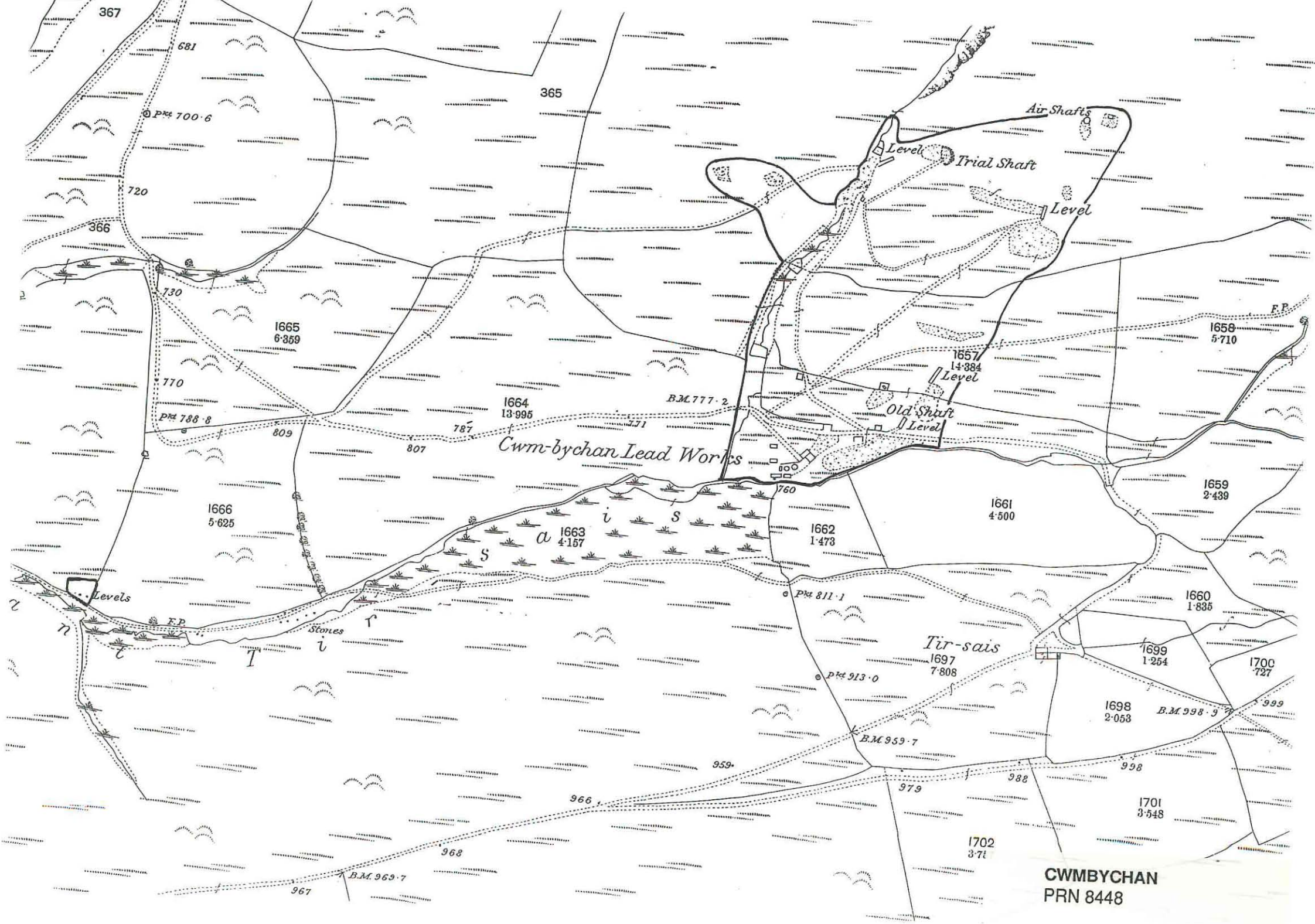


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CWMBYCHAN  
PRN 8448





CWMBYCHAN  
PRN 8448



<b>6160</b>	<b>CWMBYR (Lead/Zinc)</b>			<b>NGR</b>	SN78639475	SN79SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			245 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1862-1878	
<b>Threat</b>	Forestry/Farming	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry	

**Geology**

Silurian Upper Llandovery formation. Four veins are present, 2 ENE-WSW and 2 WNW-ESE.

Mineralisation includes a clay gangue containing lumps of lead ore. Zinc and silver were also present.

**Workings**

The main adit is located below the dumps to the north. There are two shafts on the site at SN78629472.

**Transport**

A short length of tramway leads south-west from the shaft and there is an abandoned ore-wagon close to the rails.

**Power**

The Nant Cwm-Byr stream fed waterwheels for pumping and crushing. There is a leat on the 1000ft contour across Taren Hengwm to the south. A second leat on the 1000ft contour runs across Taren Bwlch Gwyn to the east.

A wheelpit exists for pumping through the adit (41ftx6ft) and for the crusher house (27x3ft). A small wheelpit is located by the buddles. A water turbine (presumably driven by a Pelton wheel) operated a cage winding system later in the mine's life.

The pump rod can be seen in-situ in the shaft and there is an in-situ angle bob in the adjacent pit.

**Processing**

A crusher with a central wheelpit measuring 23x3ft is located south of the mine office/barracks/smithy range of buildings. The wheelpit has a room on either side possibly for dual crushers. The western room has a small western extension which may have been a jigger shed. Part of the waterwheel rim can be seen close to the crusher wheelpit.

The wooden remains of two compartment jigs are visible to the south of the crusher house.

Wooden launders running north-east lead to two round buddles of 4m diameter, each stone lined.

A small 4m long wheelpit can be seen north of the buddles containing part of the wheel rim. This may have been used to drive the buddles although the siting is unusual.

There are two ore bins adjacent to the shaft.

**Other features**

A long row of offices and a workshop are located on the eastern side of the mine adjacent to the present forestry track. The whole range measures some 35x5m in length. There is much ironwork on site and waterwheel rims and strakes are present.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid damage to the surviving mine structures.

A detailed measured surface survey of the surviving structural and earthwork features of the mine is recommended.

**References**

Bick 1990a, 6

Foster-Smith 1978, 12



Jones & Moreton 1977, 13

Jones 1922, 153

Ordnance Survey 2nd Edition 25 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMW 925098/48-49







490  
6-081

488  
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489  
3-752

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3-282

688  
5-638

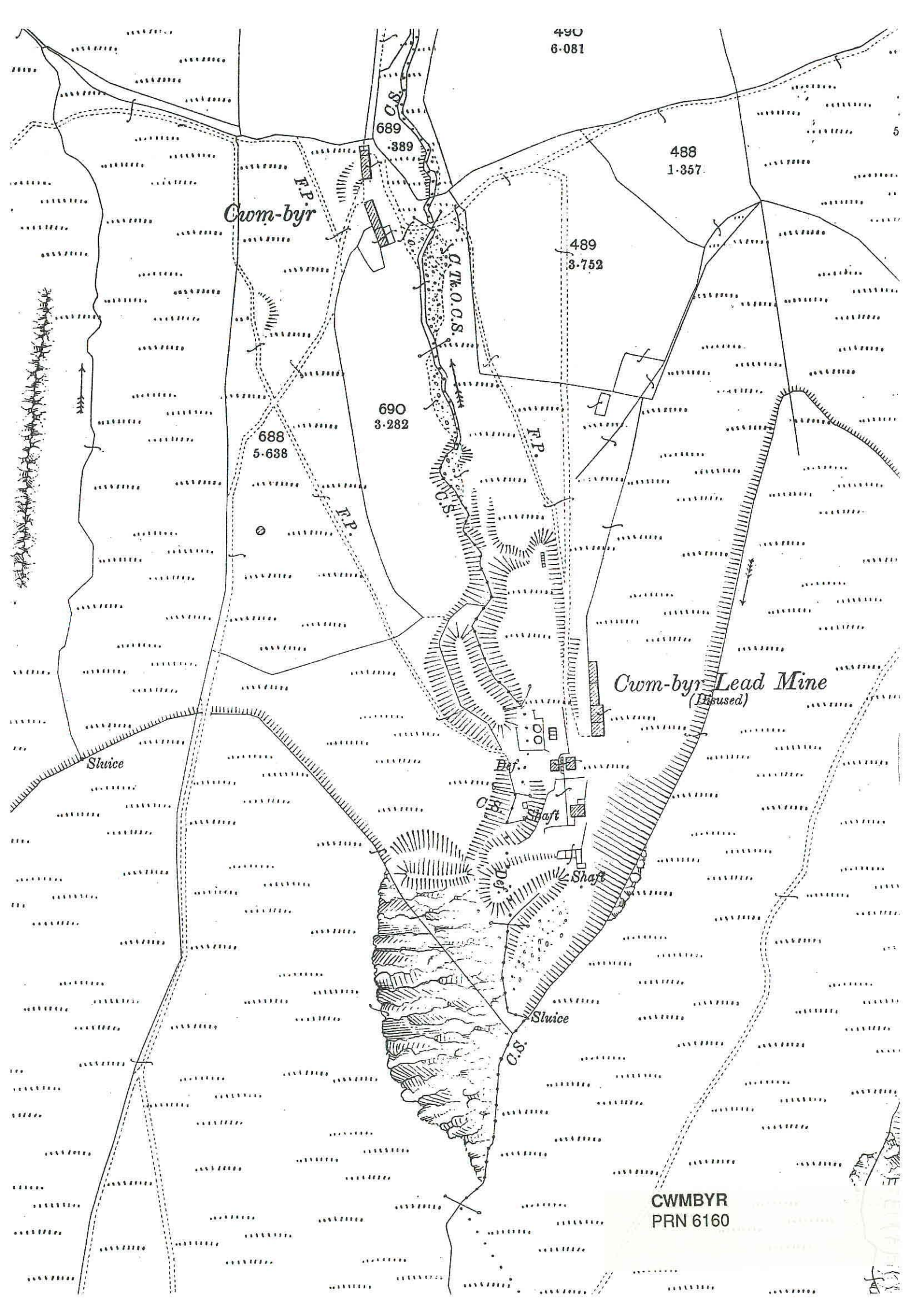
*Cwm-byr*

*Cwm-byr Lead Mine  
(Disused)*

*Sluice*

*Sluice*

CWMBYR  
PRN 6160





<b>18973</b>	<b>CWMGWEN (Phosphate)</b>			<b>NGR</b>	SJ083221	SJ02SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanfyllin			350 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1863-1885	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Graphitic phosphate concretions in Ordovician Bala limestone along with calcite and barytes mineralisation.

**Workings**

There are two levels with stoping up to the surface on the higher ground above at SJ08252209.

**Transport**

An 18" gauge tramway was apparently in use from the lower level but could not be located due to dense forestry.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 42

Davies 1875, 360

Davies 1881

Foster-Smith 1978, 7

Ordnance Survey 1st Edition 25 inch Map 1887

Regional SMR: Clwyd-Powys Archaeological Trust 1993

Williams 1985, 114-15







<b>8451</b>	<b>CWMRHAIADR (Lead/Zinc)</b>			<b>NGR</b>	SN75559465	SN79SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			190 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Pre 1840s to 1858+	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian Upper Llandovery formation. A lead/zinc vein strikes NW-SE in a quartz gangue.

**Workings**

The main level which was abandoned prior to the 1840s is still visible. There are also two shafts with an adit and trials centred on SN75559465.

**Transport**

There are short lengths of tramway leading onto the spoil tips outside the shafts, levels and on the dressing floors.

**Power**

The power source was the Nant Y Gog stream which supplied water to the pumping and crusher house waterwheels.

**Processing**

A poorly preserved crusher house and round buddles can be seen on site there are also remains of ore bins and a picking/washing floor. The processing machinery was apparently brought in from Brynfedwen Mine in 1858. The crusher waterwheel was made in Newtown and the large axle still exists in situ.

**Other features**

No evidence.

**Artifacts**

Cast iron waterwheel axle in position within wheelpit

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Bick 1990a, 6

Foster-Smith 1978, 12

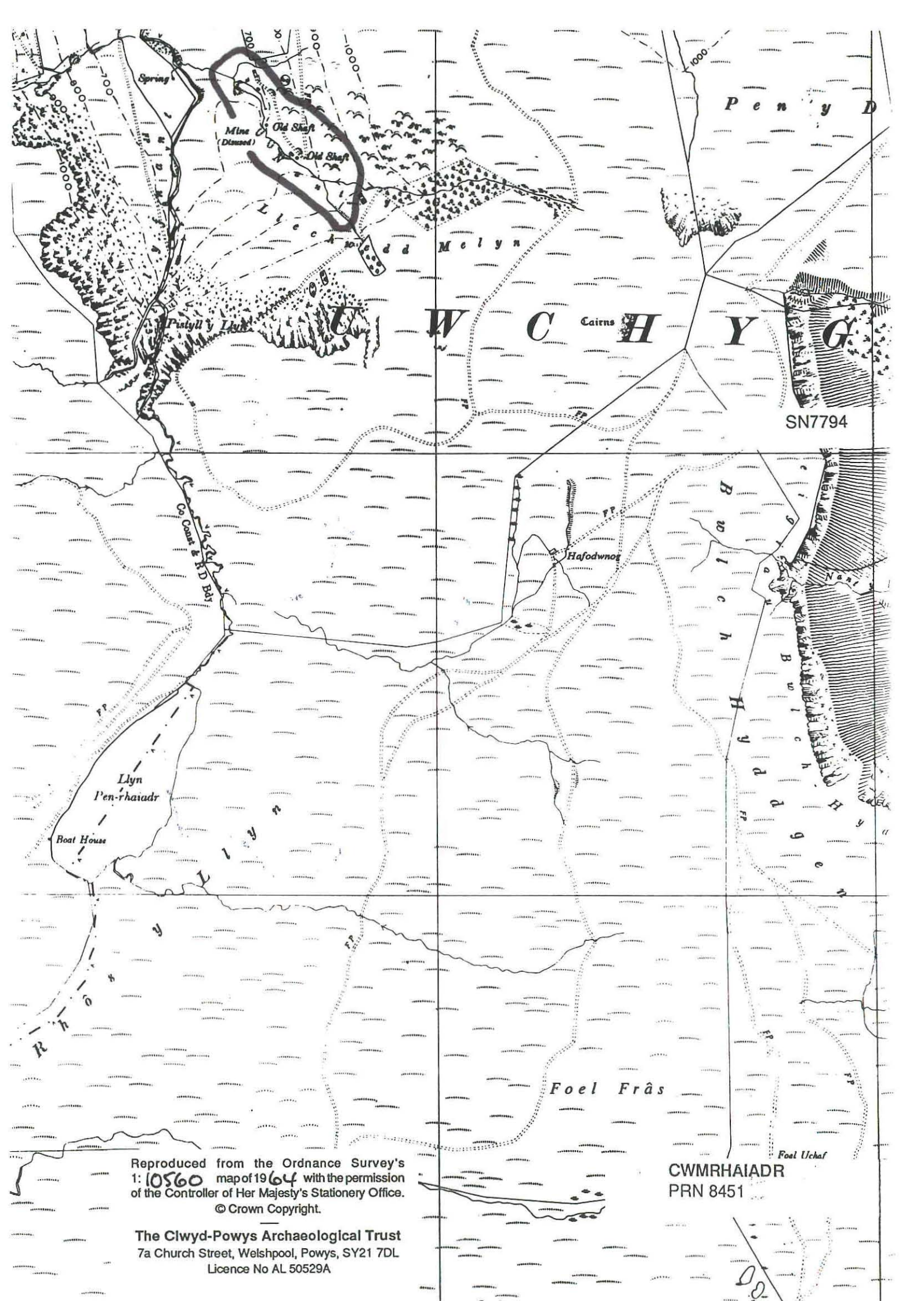
Jones & Moreton 1977, 13

Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 925098/54







<b>8497</b>	<b>CYFARTHFA/NANT DDU (Lead/Copper)</b>			<b>NGR</b>	<b>SN83409307</b>	<b>SN89SW</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			<b>460 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1842-1881	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Rough pasture/Farm buildings	

### Geology

Lower Silurian shales on the western extreme of the Dyfnwgwm lode with sphalerite, galena and chalcopryrite mineralisation.

### Workings

A large engine shaft SN83369306 and whim shaft SN83309311 are present together with a deep adit, air shaft SN83879311 and a number of short and shallow level trials which have caused surface subsidence in places. Large spoil heaps are present close to the shafts.

### Transport

In 1878 skip-roads were supplied for transport of ore from the shafts and are still readily visible on the tips.

The former pathway for transportation of the concentrate runs east from the mine above the R.Clywedog on the south side of the valley to Dylife. The path is now a public right of way on the Glyndwr's Way footpath.

Leats are numerous on the site with one supplying the crusher house from the Nant Ddu stream. A second leat runs southwards to the mine for just over a kilometre from the upper reaches of Nant Goch at SN83559406. The leat follows the 467m contour and exits into Nant Ddu just above the pumping wheel pit by means of a stone-lined leat. It seems most likely that this leat provided extra water in times of drought to the pumping wheel. The leat is marked on 1:25000 pathfinder maps as a watercourse.

A stone culvert diverting water from Glaslyn to the reservoir is visible at SN83209430.

### Power

The large and impressive earthen dam at SN83109325 to the west of the mine apparently supplied water to Dyfnwgwm mine but was probably also used for Cyfarthfa.

A pumping wheel SN83499305 and a split line of flatrods pumped both shafts. The alignment of flatrods to the northern shaft is visible as a low earthwork gulley. An angle bob pit and surrounding wall lie on the eastern rim of the engine shaft SN83309316. The pumping wheelpit is well preserved. A horse whim was used at the northern of the two shafts and the overgrown whim circle is still visible on the north-east side of the shaft.

The crusher house was driven by a large waterwheel, the pit for which is well preserved along with the adjacent crusher roll housing. Modern farm buildings have been built onto the front wall of the crusher.

### Processing

The crusher house survives at SN83699301 but most of the other features of the dressing floors have been destroyed by modern agricultural buildings.

Immediately to the south of the agricultural buildings are traces of slime settling tanks and some other indeterminate stone foundations related to processing.

Ore bins and a picking/washing floor can be seen close to the Whim Shaft at SN83309317.

### Other features

At the western extreme of the site is a square stone building with a surviving collapsed, and nearly intact, south wall at SN83239319. The purpose of this structure is not clear.

Immediately east of this is a large triangular enclosure delineated by a low earthen bank 1 metre wide and 0.40m high SN83259319. There is a possible entrance to the enclosure on the western side. A stone lined culvert crosses the enclosure from NE-SW and there are traces of other buried structures on the south side. The precise function of this enigmatic feature of the mine is by no means clear.

Close to the engine shaft is the mine office complex of buildings which incorporates a number of storerooms and possibly a smithy SN83429310.



Close to the mine, and probably of earlier date than the mining activity, are two groups of house platforms with partially intact basal wall foundations. Both are in close association with leat systems though this is presumably just a coincidence. The first group at SN83659331 consists of at least two building platforms with an adjacent short eastern branch of the main leat carrying water from Nant Goch to Nant Ddu which deposits water into the lower reaches of Nant Goch at this location.

The second platform is at SN83769331 and consists of a rectangular stone foundation with a single eastern doorway. There is an associated enclosure on the northern side with possible traces of cultivation beds visible on the aerial photographs.

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### Recommendations

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended

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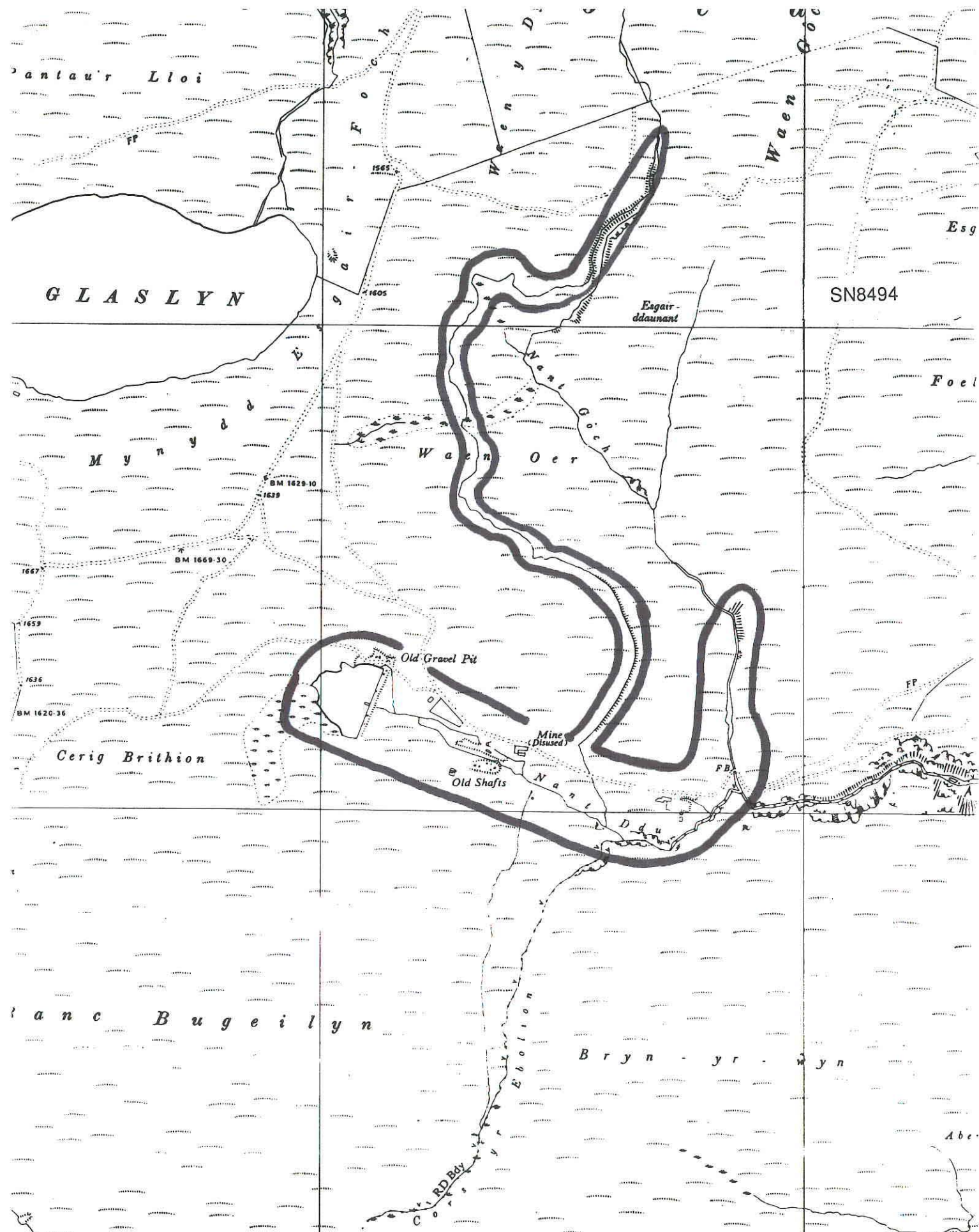
### References

Bick 1990a, 13-14  
 Foster-Smith 1978, 17  
 Jones 1922, 172  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

### Photographs

RCAHMMW 92/CS/1512-1516,1591-1597,1640-1642  
 RCAHMMW 925075/41-44  
 RCAHMMW 925097/48-51  
 RCAHMMW 925091/49-52  
 RCAHMMW 925084/70  
 RCAHMMW 925319/8-11





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CYFARTHFA  
NANT DDU  
PRN 8497

Esgair Gre



<b>5511</b>	<b>DALRHIW (Copper/Lead)</b>			<b>NGR</b>	SN88566079	SN86SE
<b>District</b>	Brecknock	<b>Community</b>	Llanwrthwl			310 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1850-1881	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

### Geology

A north-south striking lead lode was mined in Silurian rocks of the Tarannon and Llandovery series with copper and lead mineralisation.

### Workings

There is a main engine shaft which connects with an adit at the foot of the slope. There is a run in level above the mine at SN88706065 together with other trials at this location.

### Transport

There is a trackway running through the dressing floors from east to west. There is a leat running downslope to the back of the pumping waterwheel and a stone covered leat running from the orebins downslope to the Rhiwnant stream on the west side of the dressing floors.

### Power

The engine shaft was pumped by a 52x5ft waterwheel linked to pumping rods. The wheelpit survives to near full height and there is a small bob pit at the head of the shaft.

There is a small stonebreaker/crusher house south-west of the pumping wheelpit with a wheelpit attached.

There is a platform immediately south of the shaft and cut into the hill-slope which probably housed the horse driven winding frame.

### Processing

There are some enigmatic structures on the dressing floor probably associated with jigger emplacements. The remains of one of these buildings has a paved floor with a stone slab lined trough in the south west corner. On the eastern extreme of this building is evidence of more paving and another trough which sits in a small room butting against the long southern backwall.

There were no obvious buddle remains although their presence is suspected.

### Other features

There is a long mine office range by the edge of the stream with three rooms.

### Recommendations

All of the main features of this mine are well preserved, in particular the mine office, pumping wheelpit, crusher house and ore bins. The whole site should be recommended for scheduling as an ancient monument and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

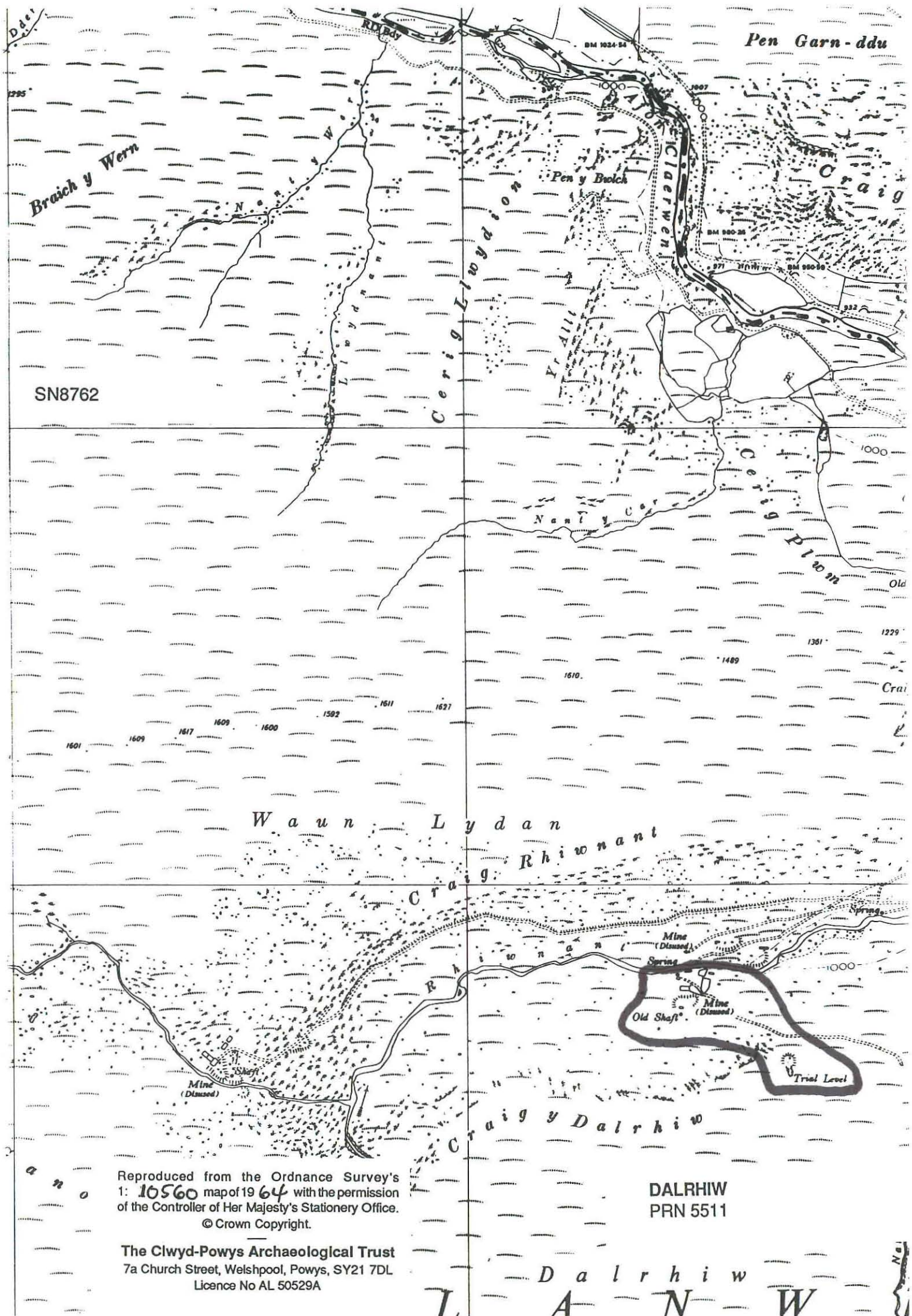
### References

Hall 1993, 85-86

Ordnance Survey 1st Edition 6 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993











<b>5942</b>	<b>DYFNGWM/CASTLE ROCK (Lead/Zinc/Copper)</b>			<b>NGR</b>	SN84909310	SN89SW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			350 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Roman/Medieval/Post-Medieval/1840s-1935	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry	

### Geology

Silurian Frongoch & Gwestyn formations. Shales and mudstones. The Dyfngwm lode is the southern branch of the Dylife lode with an ENE strike. Mineralisation includes galena, chalcopryite and zincblende with quartz and calcite gangues.

### Workings

A deep adit in the gorge connects with Boundary Shaft on the top of Pen Dylife at SN85219335.

There is a possible hushing channel to the north west of Boundary shaft which descends the southern flank of Y Grug at SN84909331. It would appear to have been fed by breaking a hole in the earthen bank boundary to the north which allowed water following the boundary ditch to be diverted southward into the prospecting hush. A circular earthen bank at the head of this possible hush may have been a storage pond/hushing dam although it lacks a sluice.

Another possible hushing site lies just below the Roman fortlet of Pen Y Crogbren at SN85709338 where the earthworks of a suspected rectangular hushing dam can be seen next to the old trackway. A narrow prospecting hush channel can be seen on aerial photographs exiting from the western corner in a southerly downslope direction.

A quarry-like opencast is located near the 1935 processing mill at SN84909315.

Some trials and clearly more productive workings can be seen on the top of the hill which take the form of opencuts, adits, shallow shaft-mound type workings, deep shafts and levels in the base of the opencuts. These workings are clearly attempts to locate extensions to the Dylife and Dyfngwm lodes. The workings on both of these lodes trend ENE/WSW and run from SN84829326 to SN85789342, a total distance of 1km.

Three levels are particularly interesting as they are probably of great age; all are run-in and one has produced evidence of manual dressing in the form of stone mortarstones buried in the tips. All have a small but constant amount of water exiting from the buried entrances. They are located at SN85379300, SN84959325 and SN85069333.

Further west along the Clywedog gorge are a number of levels at varying heights in the hillside between SN84789317 and SN84329313.

Castle Rock SN84229310 is probably one of the best natural lode exposures in Wales. At the foot of the rock are numerous trials, a shaft, level and wheelpit.

### Transport

Tramways lead from the main adit SN84929315 to inclines for carrying the ore down to the dressing floors along the banks of the River Clywedog.

There is a steep track leading eastwards out of the valley onto the top of the hill. This was probably the route by which the ore transport connected with the old coach road on Pen Dylife and later the Machynlleth road in Dylife.

### Power

A leat runs into the dressing floors from the Afon Clywedog, traversing the northern side of the valley on its course.

2 waterwheels, stamps and a drawing machine were installed in 1850. In 1856 a steam engine was installed to drive the pump rods in the main adit. In 1858 a 36" condensing engine was added. In 1864 a twin 10" cylinder horizontal engine assisted the pumping wheel. Also in 1864 a steam traction engine was purchased though it probably saw little use. Two wheelpits and engine bases outside the adit entrance are visible.



At Boundary shaft SN85259334 a 60" Cornish pumping engine was installed. Two ten ton boilers were placed alongside the engine. The iron gudgeon from the balance bob is still visible next to the shaft. The engine house has completely collapsed. The reservoir for the boilers is located immediately to the west of the engine remains.

In 1861 a 50x6ft winding waterwheel was erected in Dylife at SN86329400 which was drawing at the Old Engine and possibly also the Boundary shaft. The wire winding cable was carried over Pen Y Crogbren partly in a gully which is still visible for a short distance at SN85789350.

### Processing

A poorly preserved crusher house is located by the river with two beams for supporting the single pair of crushing rolls at SN84909301.

To the east of this are the substantial concrete and flagstone foundation bases of the 1935 Hirnant Minerals Ltd processing mills SN84879302. These foundations extend from the river and up the hillside to the north. Documentary sources refer to this mill incorporating the following machinery: a 50hp crude oil engine, 16"x9" stone breaker, screens, granulator, shaking conveyor feeder, 24"x14" crusher rolls, two vibrating screens, a 6 compartment Bull Jig, 2 cleaning jigs, a Ball Mill, 4 concentrating tables, a 3" centrifugal pump, two 2" pumps and an elevator.

The slurry left over from the ore concentrator was pumped out to a line of seven connected slime pits which run along the south bank of the Afon Clywedog SN84899302.

Other foundation features on the dressing floor are poorly preserved and difficult to interpret.

### Other features

Two rectilinear enclosures are located very close to the mining area and may be associated with early mining operations although some caution should be noted in this interpretation as they may also be post-medieval agricultural enclosures.

The largest of these enclosures is located at SN84869322 and consists of a large square bank of earth and stone blocks of approx. 1.5m width and surviving to 0.35m in height with traces of a very shallow ditch on three sides and a deeper gully on the western side. No obvious entrance was recorded. The enclosure is situated on the rim of the northern side of the gorge above the opencasted area recorded above.

The smaller enclosure is approximately 200yds to the south-west of the large enclosure on the opposite side of a deep gully which descends into the opencast area at SN84809313. The makeup of the earthwork has the same characteristics as the large enclosure and it may be similar in date and function.

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### Recommendations

As a sample of a varied and largely intact mining landscape, potentially spanning two thousand years of mining history, urgent consideration should be given to protecting the mining features on Pen Dylife and in the Clywedog valley by scheduling or other appropriate means.

As a sample of a varied and largely intact mining landscape, potentially spanning two thousand years of mining history, urgent consideration should be given to protecting the mining features on Pen Dylife and in the Clywedog valley by scheduling or other appropriate means.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Mining in the Dyfnwgwm, Castle Rock and Pen Dylife locations has been intensive and varies greatly in both method and dating. A detailed surface survey of the surviving structural and earthwork features combined with a documentary survey of the mining history and archaeology of this area is recommended.

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### References

- Bick 1985, 3-30
- Bick 1990a, 14-18
- Foster-Smith 1978, 18
- Jones & Moreton 1977, 15



Jones 1922, 155-6

Rees 1975, 270

Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS92/24/06-13

CPAT CS92/25/02-07,11-34

CPAT CS92/29/01-37

CPAT 155.01-37

CPAT 156.01-06,35-36

RCAHMMW 92/CS/1585-1589,1643-1648

RCAHMMW 925091/41-44

RCAHMMW 925090/51-55

RCAHMMW 925319/12

RCAHMMW 925097/52-55

RCAHMMW 925098/41-44







<b>5648</b>	<b>DYLIFE (Lead/Zinc/Copper)</b>		<b>NGR</b>	SN85609390	SN89SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair		380 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	Roman ?/17th c./18th c./19th c. to 1920s
<b>Threat</b>	Farming/Reclamation	<b>Status</b>	None	<b>Land use</b>	Pasture

### Geology

Lower Silurian Frongoch formation shales and mudstones. The Dylife lode divides into two other lodes just to the west of the village called the Llechwedd Ddu and Esgairgaled lodes. The main workings were carried out on the Llechwedd Ddu lode. Mineralisation includes copper, lead, zinc and silver.

### Workings

The earliest workings consist of opencuts, levels trials and shafts on the north-western slopes of Pen Dylife opposite the Rhanc Y Mynydd cottages at SN85599388 followed by 17th & 18th century workings on the Esgairgaled lode in Nant Dropyns at SN85889418 and SN85799420 where two shafts (the Pencerig and the Esgairgaled) and two adits (the Pencerig deep and Pencerig shallow) can be seen.

At the main Dylife workings area adjacent to the Afon Twymyn five shafts can be seen including Bradford's at SN85889403, Alfred's at SN85599389, Footway at SN85749395, Llechwedd Ddu Engine at SN85559392 and an unnamed shaft-mound at SN85609405. The inclined Llechwedd Ddu adit lies immediately south-west of Llechwedd Ddu shaft.

Earlier opencuts and stopes breaking to the surface on the Llechwedd Ddu lode can be seen on the southern terrace immediately above, and parallel with, the Afon Twymyn. Trials to determine the western extent of the Dylife lode can be seen on the easternmost slopes of Y Grug at SN85109356 and SN85059350 and consist of shallow opencuts and shaft-mounds in two nearly parallel lines.

### Transport

A number of tramways leading from the workings to the dressing floors exist within the valley bottoms of the Afon Twymyn and Nant Dropyns. The longest of these is now a public footpath through the main mine site on the north side of the Afon Twymyn and leads from the Red Wheel area to the main dressing floors, SN85599397 to SN86009400.

Close to the ladder shaft remains of railway sleepers for ore wagons can be seen emerging from the surrounding spoil at SN85659395.

### Power

Two reservoirs exist on the Afon Twymyn which supplied power to the dressing floors, these are located at Pwll Rhydporthmwyn SN84759400 and the smaller reservoir at SN93908575.

Two reservoirs are located on Nant Dropyns at SN853099450 from which three leats run eastwards on each side of the valley slopes.

One of these leats drove the 63ft Red Wheel which was used for pumping and drawing at the Llechwedd Ddu Engine shaft, Alfred's shaft and Bradford's shaft by means of three split lines of reciprocating rods. The course of the leat can be traced both on the ground and on the first and second edition OS maps. A curious extension of this leat can be seen on the aerial photographs at SN85679402 running further west beyond the point where the Red Wheel launder connected. This was presumably to run water into the lower reservoir on the Afon Twymyn when the wheel was not in use and would have been controlled by a sluice close to the Red Wheel launder connection.

The same leat initially supplied power to the Black Wheel and early processing machinery in Engine Dingle and later to the main dressing floors at Dylife by an extension from a point near Esgairgaled shaft.



Another two leats to the main dressing floor area run along the south and north sides of the Afon Twymyn from Pwll Rhydporthmwyn.

In later years the Red Wheel appears to have been driven by a leat running directly from Pwll Rhydporthmwyn as can be clearly seen on aerial photographs where this leat cuts across earlier leat earthworks. Overall the leat network at Dylife is very complex and clearly spans many periods of use. A detailed ground survey and transcription of information from aerial photographs would go a long way to solving the complexity.

Two other waterwheels were used on the dressing floors. Two high pressure 'puffer' engines acted as standbys in case of drought at the Red Wheel and on the dressing floors, these were later replaced by larger engines.

Bradford's shaft at SN85909405 was provided with a winding engine while Alfred's shaft at SN85709393 was drawn and pumped by the Red Wheel.

### **Processing**

A full range of processing machinery was in use including 6 round buddles, a Zenner buddle, jiggers, 2 crushers and a stonebreaker plus other machinery. The main processing area SN86009399 is poorly preserved and much recent damage has been caused by the demolition of foundations to be used as hardcore in tracks elsewhere. Some timber from launders and buddles is evident close to the road bridge over the Afon Twymyn but has been partly destroyed by the use of heavy plant machinery in the area.

Two wheelpits are visible on the dressing floor one of which has been partly destroyed at SN86039398 with a number of tie rods in situ. The other lies further to the west adjacent to the tramway and is filled with collapsed material SN85979398.

All other building remains lie buried in collapsed material and spoil heaps.

### **Other features**

The village of Dylife is essentially a mining village and all of the surviving buildings are of industrial interest. These include the demolished church and graveyard SN86119403, the Star Inn public house SN86309403, the miners cottages and their associated allotment gardens at Rhanc Y Mynydd SN85509400. Originally there were four inns, several chapels and a school. The present Machynlleth mountain road was probably constructed after 1864 to carry transport goods from Llanbrynmair railway station.

The foundations of a smithy are visible close to the dressing floors at SN86009398.

### **Artifacts**

Cast iron supports for 'bar' rails have been found close to the Llechwedd Ddu shaft.

The shaft cage for the Llechwedd Ddu shaft was found buried in spoil heaps nearby and was excavated in 1970 (D. Bick pers.com.). The cage is now at the Llywernog Mining Museum.

In Nant Dropyns adjacent to Esgairgaed shaft two stone mortarstones can be seen close to the edge of the stream at SN85809420. The largest measures 55cm across by 16 deep and displays a number of circular hollows on either face. A second broken mortarstone lies in the stream with two hollows on one face. These stones either acted as the dressing plates for a stamps mill or were for manual crushing. Their dating is unknown though they may be related to the seventeenth century exploitation of the Esgairgaed lode.

There is a brief reference to the finding of Roman smelting hearths and tiles amongst other finds in Montgomeryshire Collections (Pryce 1932) during the late nineteenth century.

No evidence can be found on the ground for smelting or other Roman activity other than the remains interpreted as a Roman fortlet on Pen y Crogbren at SN85609348 and the immediately adjacent alignment of a potentially Roman road.

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### **Recommendations**

Due to the intense mining activity, potentially spanning 2000 years, at this site it is strongly suspected that the stratigraphy of mining archaeology at Dylife will be deep and complex. The mining landscape at Dylife as a whole, along with the Dyfnwgwm landscape on the hillside above, is extensive and morphologically and chronologically varied and should be given urgent consideration for protection by scheduling or other appropriate means.



Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

A detailed measured surface survey of surviving earthworks and structural remains, combined with a detailed search of all available documentary and cartographic sources is recommended.

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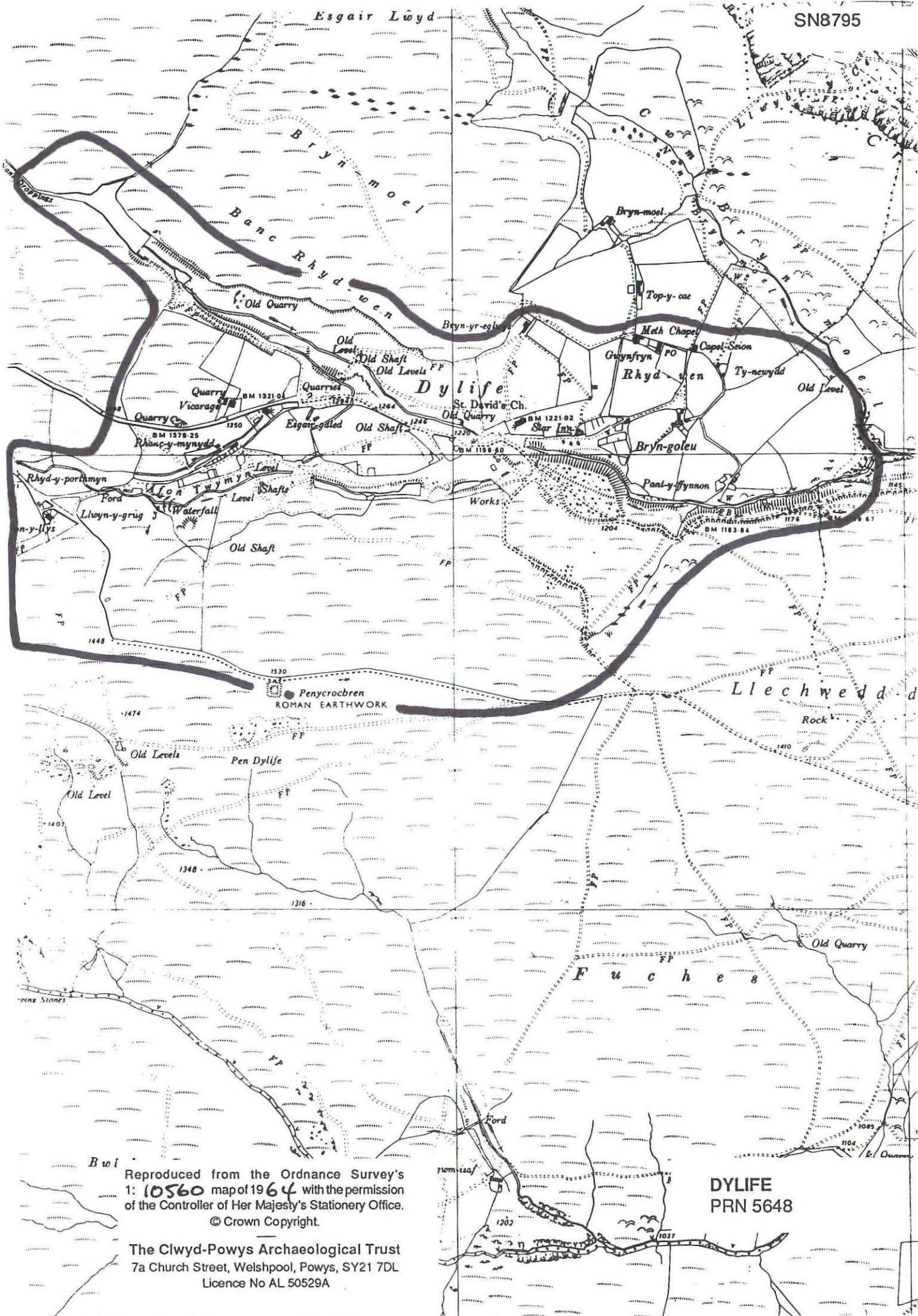
#### **References**

Bick 1985, 3-30  
 Bick 1990a, 20-23  
 Bick 1991a, 30-31  
 Foster-Smith 1978, 19  
 Jones & Moreton 1977, 15  
 Jones 1922, 26, 39, 154  
 Ordnance Survey 1st Edition 25 inch Map  
 Ordnance Survey 2nd Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

#### **Photographs**

CPAT CS92/19/20-36  
 CPAT CS92/21/08-37  
 CPAT CS92/22/01  
 CPAT CS92/23/02-36  
 CPAT CS92/24/01-05  
 CPAT CS92/25/01,08-13  
 CPAT 152.00-36  
 CPAT 153.00-37  
 CPAT 154.00-34  
 RCAHMMW 92/CS/1577-1584,1590,1644  
 RCAHMMW 925090/41-50  
 RCAHMMW 925091/45-47





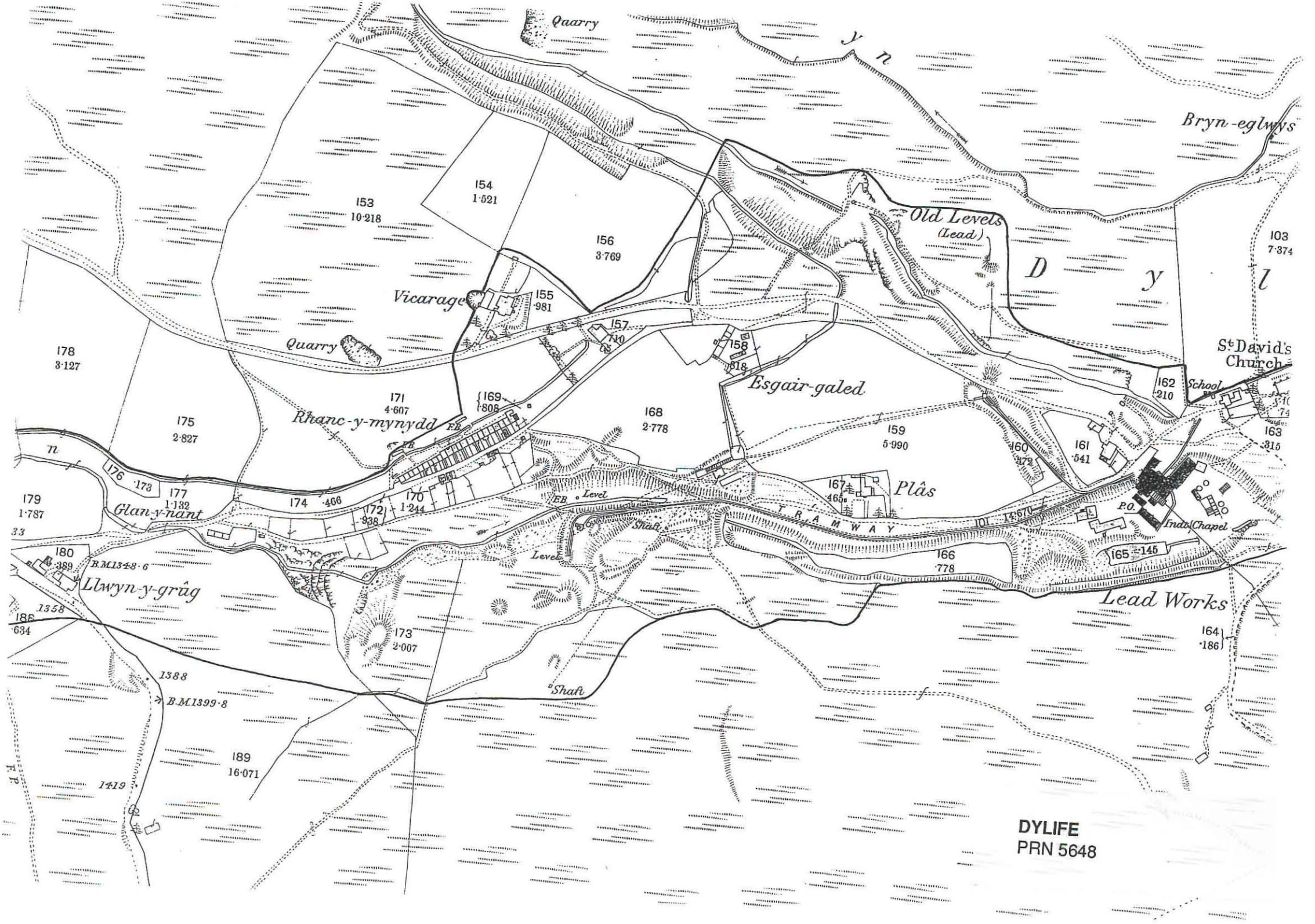
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DYLIFE  
PRN 5648





DYLFIE  
PRN 5648



<b>5937</b>	<b>EAST VAN (Lead)</b>			<b>NGR</b>	SN94958850	SN98NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			225 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1871-1880	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

This mine lies on the eastern extension of the main Van lode in Silurian Gwestyn shales and beds of the lower Frongoch formation. Mineralisation includes galena.

**Workings**

3 shafts (SN94988846, SN95218855, SN95848775), a long adit (SN95258850) and 4 levels (SN94538832, SN95058864, SN95528880 and SN95668876) can be seen on the slopes to the north of Nant Gwden.

**Transport**

No evidence.

**Power**

A horizontal engine was installed during 1871 and was in use by April 1872. The engine measured 24ins x 4ft with a 30ft x 7ft diameter boiler. The engine and boiler houses survive at foundation level with some interior detail and an intact chimney SN94968848.

**Processing**

No evidence.

**Other features**

Some foundations of unknown use were seen in the field immediately west of Pwll Yr Ebol Farm SN94608832 and are probably associated with a disused level at the same location.

**Recommendations**

The engine house, its boiler and the chimney remains should be preserved. These features should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

**References**

Bick 1990a, 45  
 Foster-Smith 1978, 29  
 Glamorgan-Gwent Archaeological Trust 1993, forthcoming  
 Jones & Moreton 1977, 21  
 Jones 1922, 5, 43, 177  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

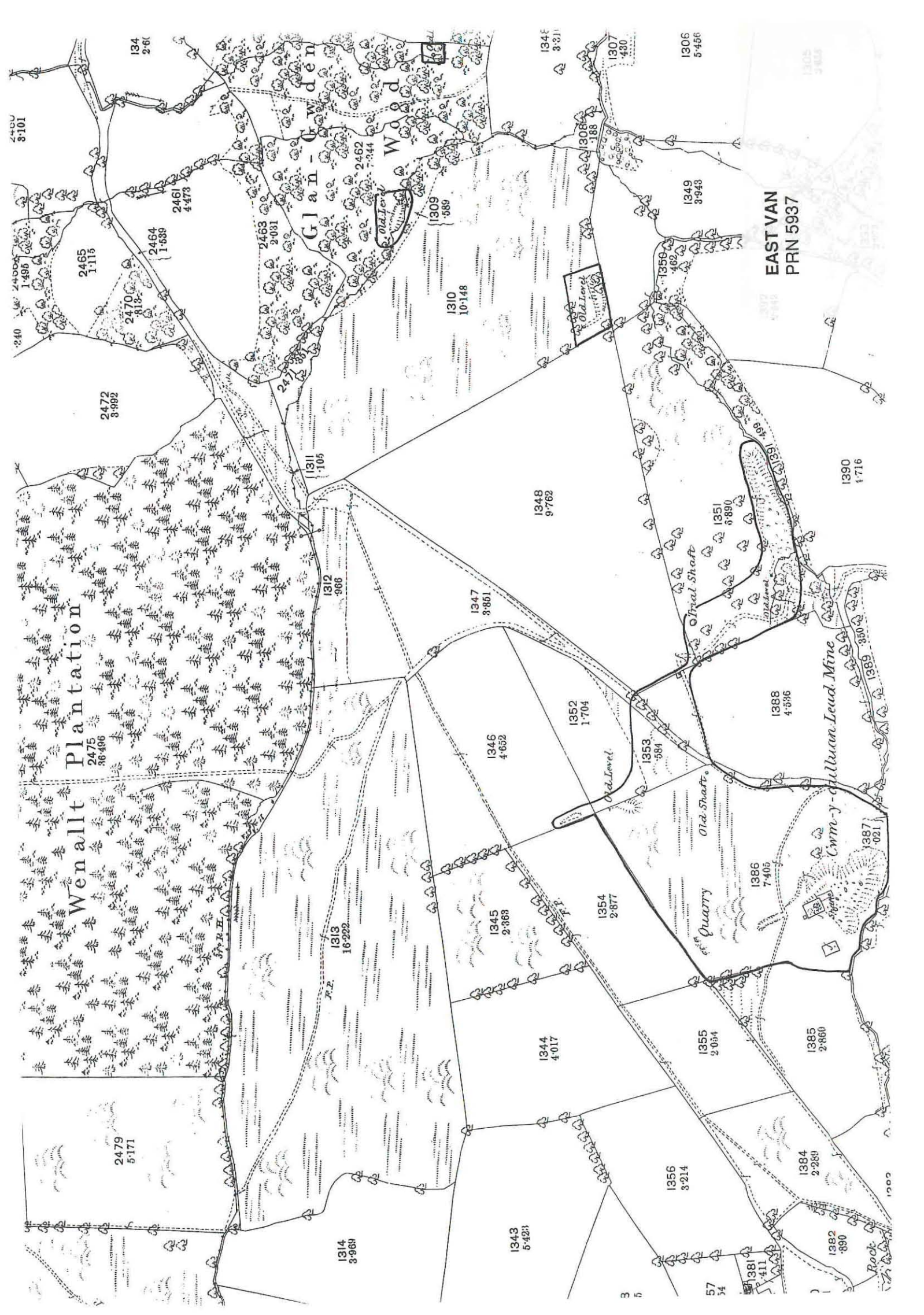
**Photographs**

CPAT CS92/16/10-22  
 CPAT 150.00-07











<b>8436</b>	<b>FEDW;St.HARMON (Lead)</b>			<b>NGR</b>	SN97657930	SN97NE
<b>District</b>	Radnorshire	<b>Community</b>	St.Harmon			300 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1869-1878	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Pasture	

### Geology

The vein trends ENE in Silurian Frongoch formation rocks. The mineralisation includes galena, pyrite and chalcopyrite.

### Workings

A large engine shaft, now blocked, and an older shaft, also blocked, are situated at the south-western end of the sett. There was also a deep adit and level both now run-in.

### Transport

There is a short run of tramway surviving as earthworks on the dressing floors which supply ore to the ore bins above the buddles.

A leat leads off from the stream down to the dressing floors where it supplied water to the buddles and crusher.

### Power

Substantial remains of an engine house survive on the dressing floors. This was a 33" cylinder double acting engine used for pumping, winding and crushing. The engine house has brick quoins on the corners and a round chimney attached to the corner of the boiler room. There appears to have been a stone lined culvert running northwards out from the engine (?) room. The engine also pumped the West Fedw mine shaft.

A substantial concrete base south-west of the latter building for another horizontal winding engine displays a number of fixing bolts and narrow linear pits. Interpretation is made difficult by the dense tree cover.

A number of small waterwheels are mentioned as being present but the only wheelpit seen was for driving the two buddles.

A large reservoir is located at the south-western extreme of the mine for supplying water to the dressing floors.

There is a bob pit at the rim of the engine shaft.

### Processing

A crusher house and two round buddles are visible together with a set of seven ore bins above the buddles.

A substantial foundation exists above the buddles which has traces of internal partitions but its function is not clear; it would be the most logical position for a platform for the jiggers.

Two large ore bins, which have largely collapsed due to damage when a nearby farm track was cut through, can be seen below the engine shaft.

### Other features

Mine office and store buildings are to be found alongside the track into the small forestry plantation below Plas Tytwch.

### Recommendations

The dressing floors on this mine are exceptionally intact with a number of unusual surviving features which include the substantial remains of the engine house, a range of seven shallow storage/ore bins, and the most intact circular buddles in the county, all of which should be preserved. These features should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.



Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

A detailed measured surface survey of the surviving structural and earthwork features of the mine is recommended.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

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#### **References**

Hall 1993, 77

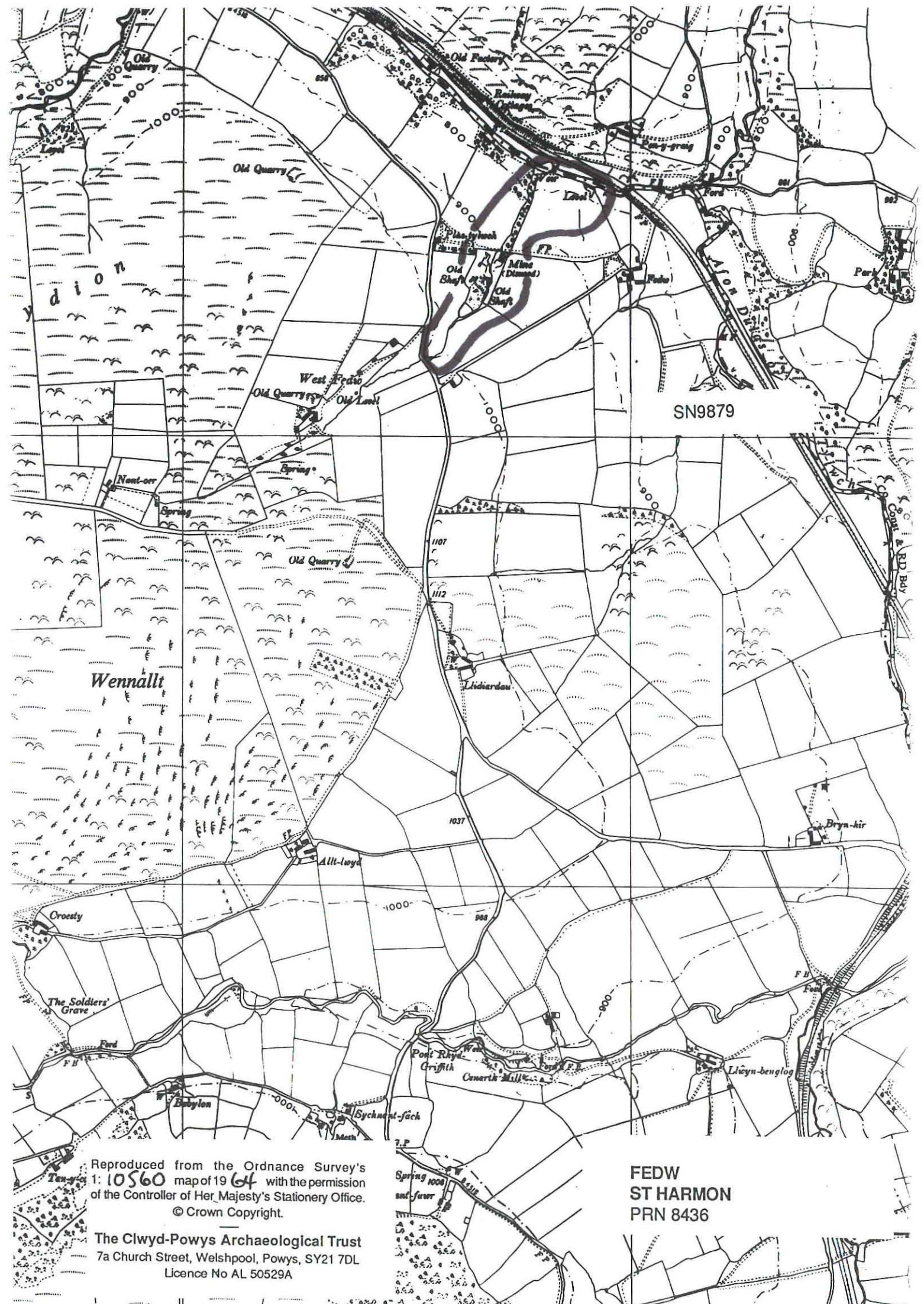
Ordnance Survey 1st Edition 25 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993

#### **Photographs**

CPAT CS93/27/28-35



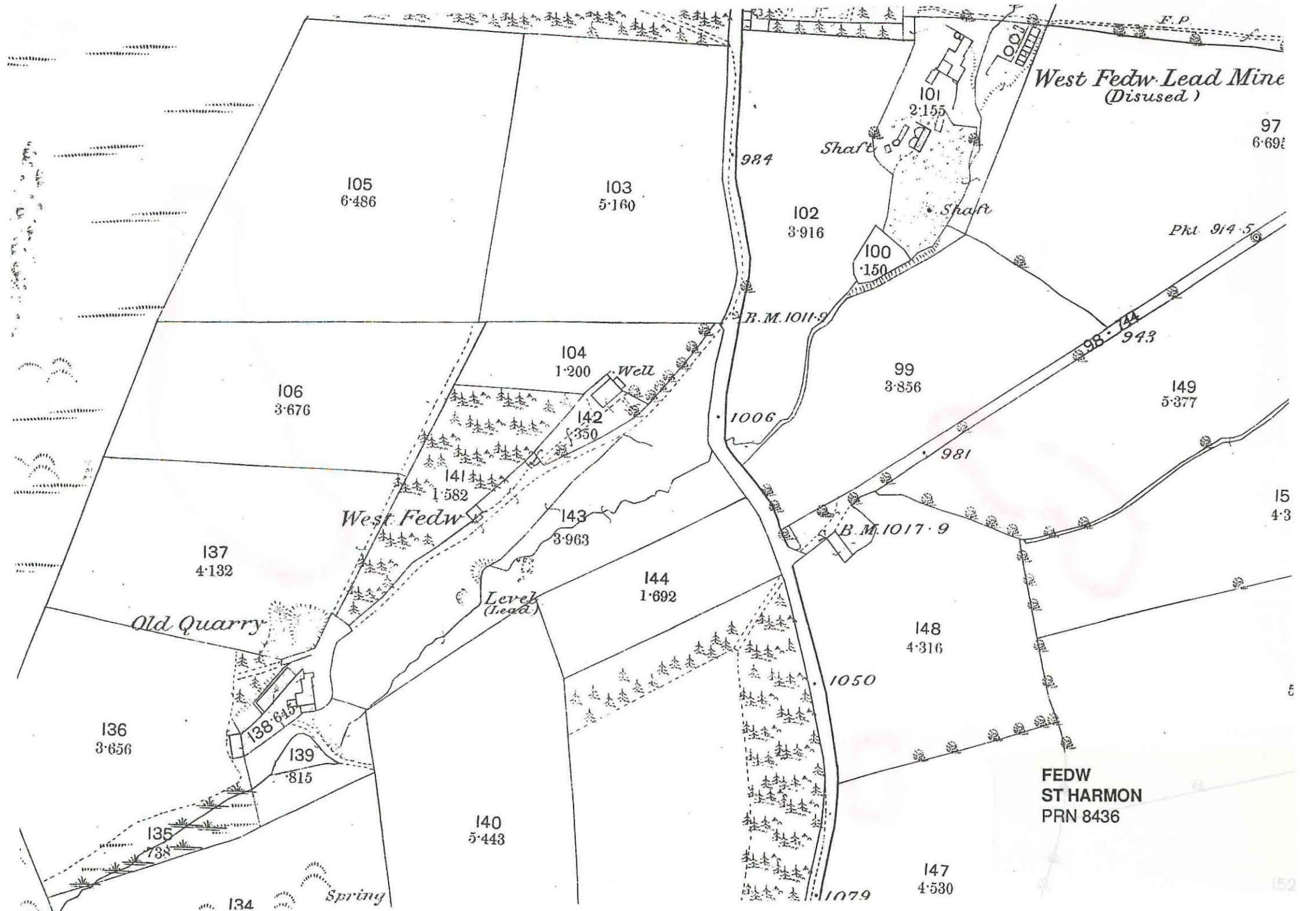


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FEDW  
 ST HARMON  
 PRN 8436







**18984 FRON-FELIN (Lead)****NGR**

SH87250071

SH80SE

<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			205	mOD
<b>Form</b>	Earthworks/Structures/Documen	<b>Condition</b>	Near Destroyed	<b>Date</b>	1848-1880		
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture		

**Geology**

Silurian Frongoch formation shales and slates with galena mineralisation in a single lode.

**Workings**

There are four levels at SN87360046, SN86620032, SN87660045 and SN87660051. There is another possible run-in deep level on the dressing floors at SN87250073.

The 1871 plan in the NLW collections shows a top, middle and deep adit with 'old sump' marked at the top of the hill. Above and below the latter a number of trials are marked. A shaft connects to the top adit.

**Transport**

There are the usual traces of tramway beds surviving as earthworks.

**Power**

No evidence.

**Processing**

There is much evidence of manual processing in the form of crushed rock and tailings heaps.

Traces of ore bins and a picking/washing floor can be seen.

**Other features**

There are foundations of a small mine office.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels

An aerial photographic survey of this mine site is recommended for enhancement of surface detail

**References**

Burt et al 1990,

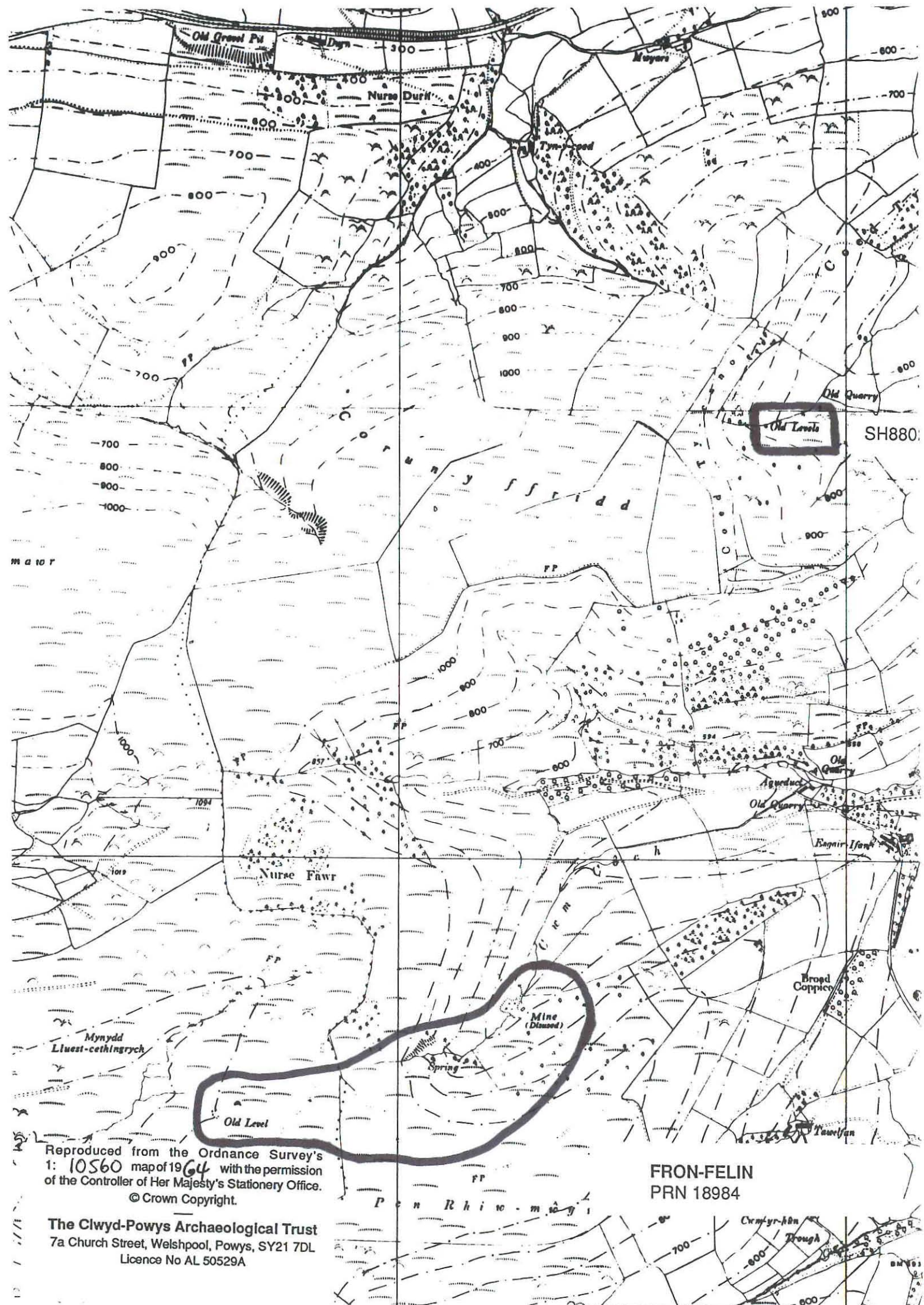
Jones 1922, 172

National Library of Wales Mine Plans: Stack 8 AG

Ordnance Survey 1st Edition 25 inch Map XXVII(9)

Regional SMR: Clwyd-Powys Archaeological Trust 1993



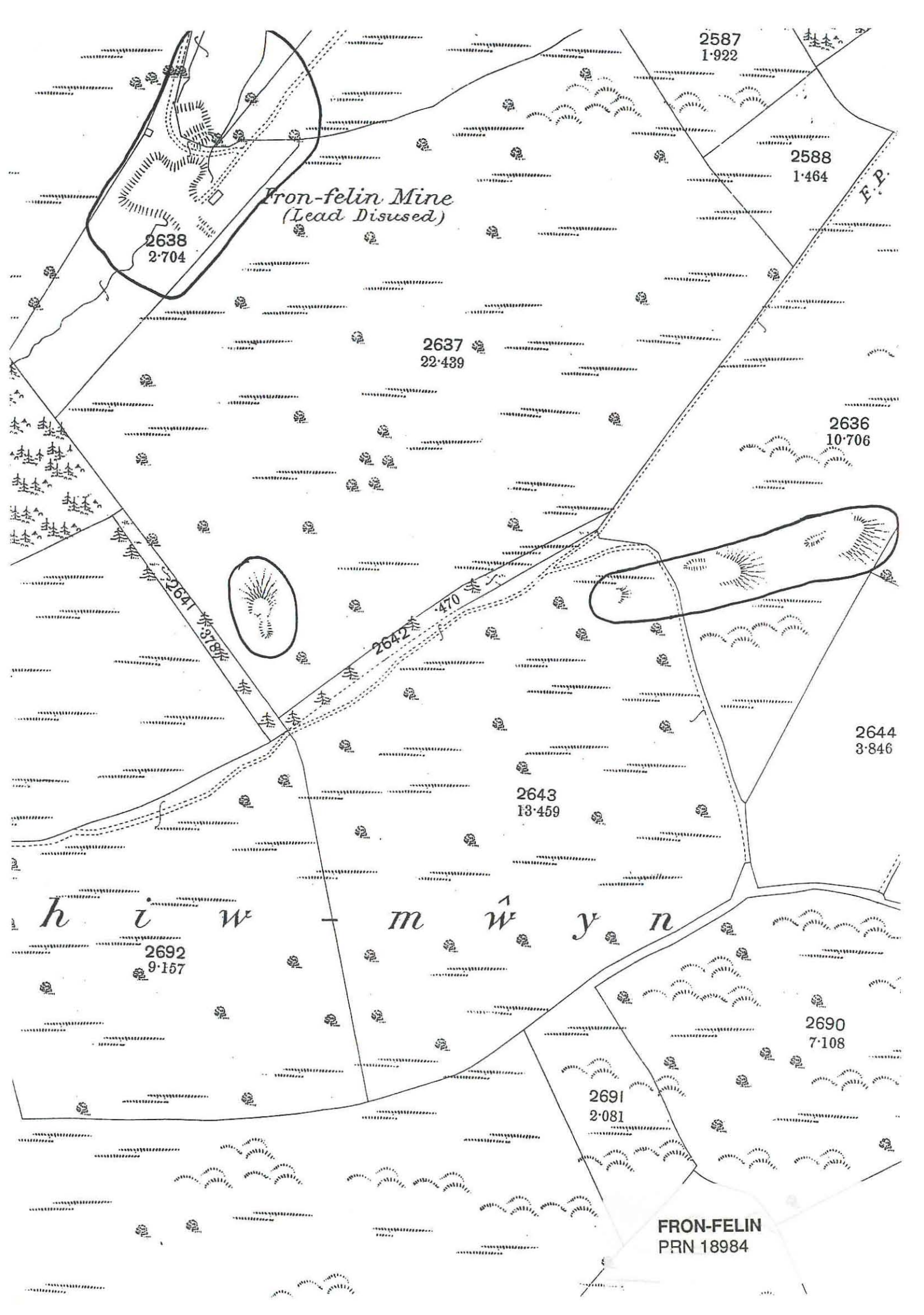


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FRON-FELIN  
PRN 18984





2587  
1-922

2588  
1-464

F.P.

*Fron-felin Mine*  
(Lead Disused)

2638  
2-704

2637  
22-439

2636  
10-706

2641  
3-378

2642  
4-470

2644  
3-846

2643  
13-459

*h i w - m w y n*

2692  
9-157

2690  
7-108

2691  
2-081

FRON-FELIN  
PRN 18984



<b>8479</b>	<b>GEUFRON (Copper)</b>			<b>NGR</b>	SN88588570	SN88NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			300 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	18th century-1852	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian and Ordovician. The Van lode has been exploited on a vein striking ENE. The mineralisation is mainly chalcopyrite in a quartz and calcite gangue. There is some sparse galena.

**Workings**

There are trials and opencuts on the outcrops. A crosscut and deep adit with levels connect to a shaft. Cummings Engine shaft SN88608570 is the latest feature and is still open as is one of the levels above.

**Transport**

Pack horses were used to transport ore to Garreg on the River Dovey in the 18th century.

**Power**

A 30ftx3ft waterwheel was used for pumping.

**Processing**

The 19th century dressing floors are believed to have been situated where Geufron Farm is now located SN88288565. No obvious remains survive.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

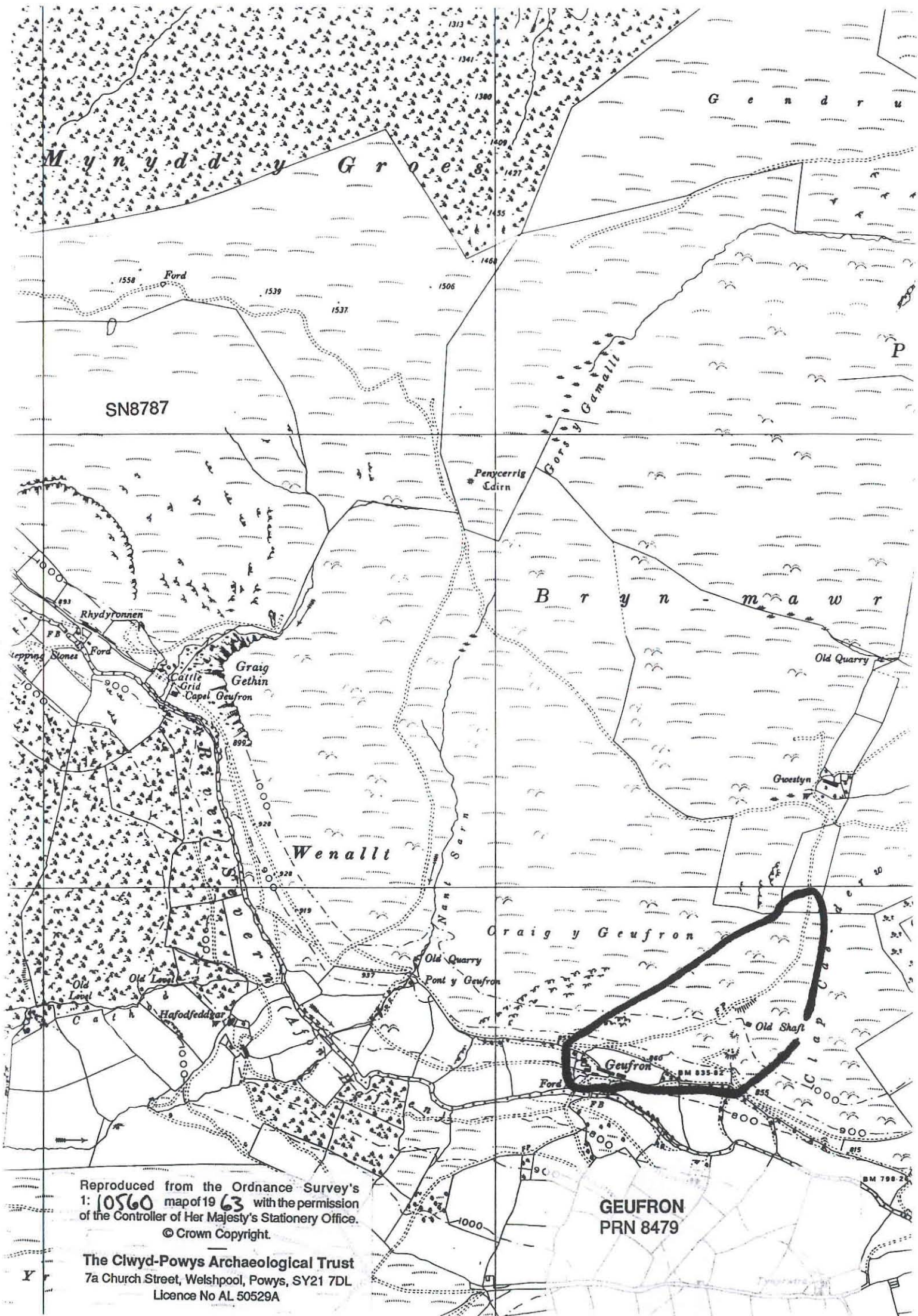
**References**

Bick 1990a, 32-34  
 Bick 1991a, 11-17  
 Foster-Smith 1978, 23  
 Hamer 1872, 27  
 Jones & Moreton 1977, 15  
 Jones 1922, 33, 46, 173  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS92/10/17-23  
 RCAHMMW 925089/70  
 RCAHMMW 92/CS/1574-1575



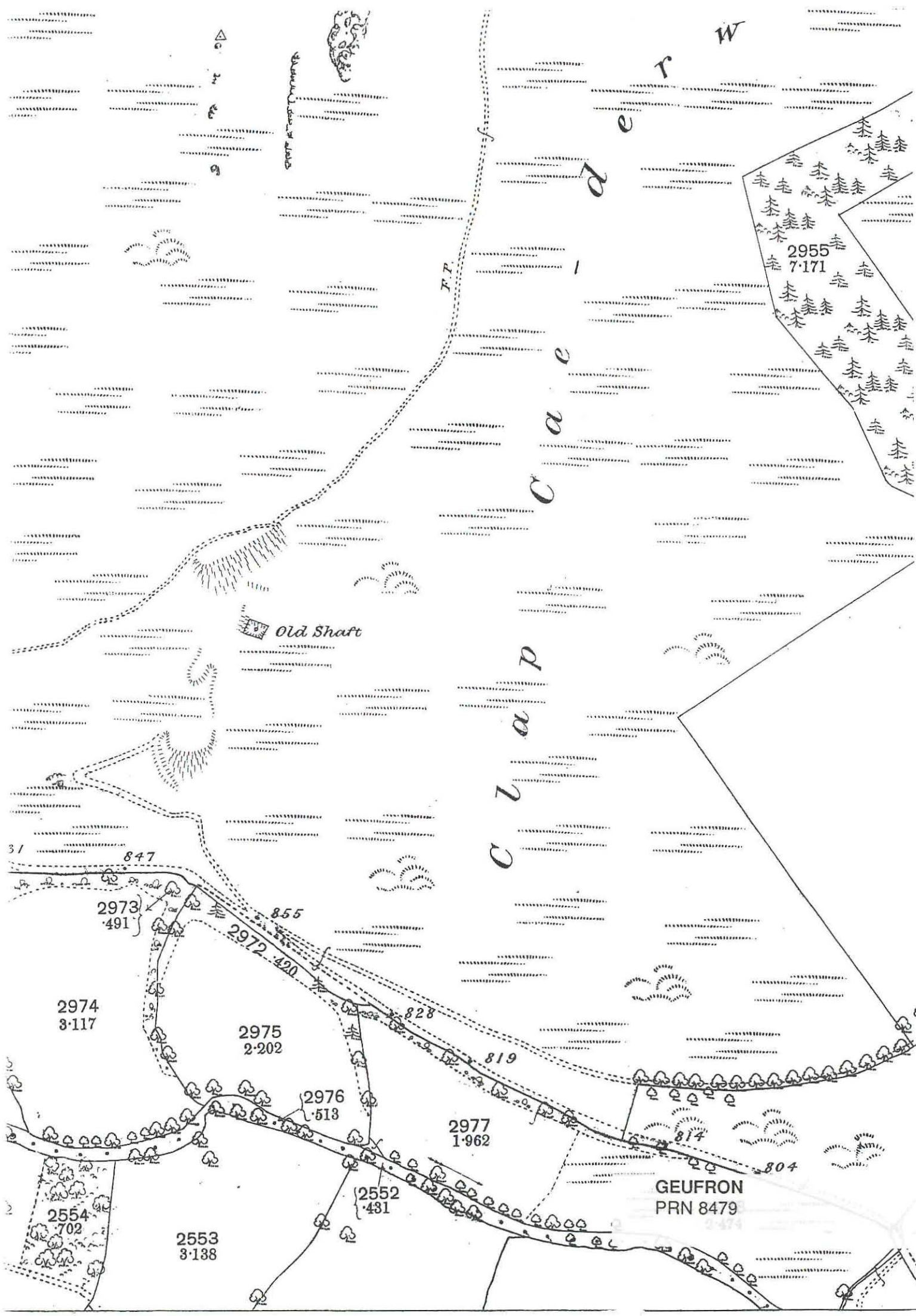


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GEUFRON  
PRN 8479







**18985 GLASLYN (Copper)****NGR**

SN81289425

SN89SW

**District** Montgomeryshire**Community** Cadfarch

220 mOD

**Form** Earthworks**Condition** Damaged**Date** Roman ?/1877-1884**Threat** None**Status** None**Land use** Pasture

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**Geology**

The rocks consists of Silurian Gwestyn formation shales and slates with copper mineralistaion. The lode strikes east-west.

**Workings**

There are six levels in line descending the precipitous slopes of Llechwedd Y Cwm from east to west. There is also a trial shaft at the foot of the slope at SN80989427.

**Transport**

There is a steep zig-zag path descending the slope and connecting five of the levels which no doubt acted as the main haulage route.

**Power**

No evidence.

**Processing**

There are traces of round buddles and ore bins at the foot of the slope.

**Other features**

No evidence.

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**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

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**References**

Bick 1990a, 12

Burt et al 1990, 63

Jones 1922, 174

Ordnance Survey 1st Edition 25 inch Map XXXIII(10)

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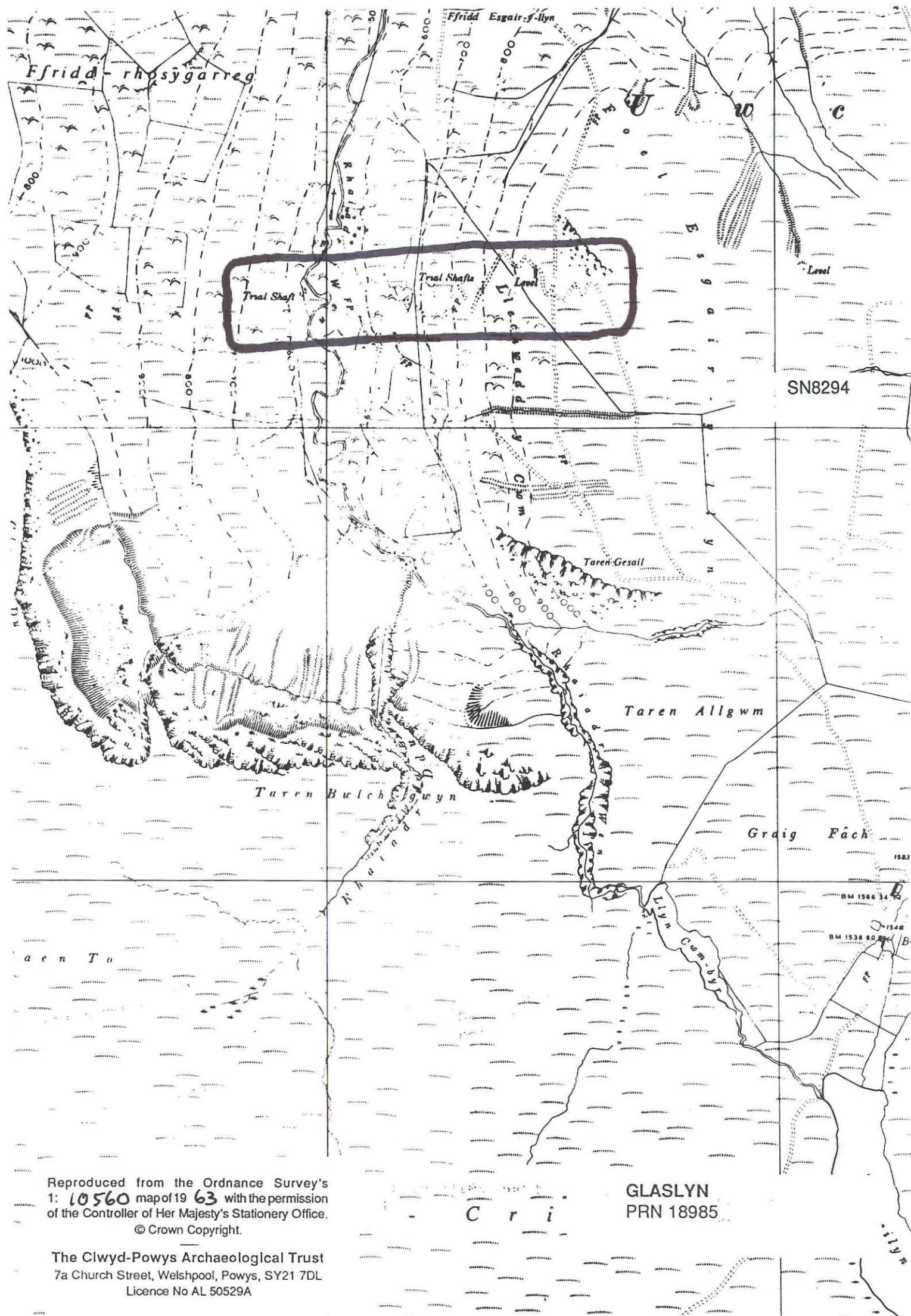
**Photographs**

RCAHMMW 92/CS/1638

RCAHMMW 925097/41-43

RCAHMMW 925096/55-56







<b>18986</b>	<b>GLYN (Lead/Barytes)</b>			<b>NGR</b>	SN92478724	SN98NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			300 <b>mOD</b>
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Destroyed	<b>Date</b>	1870-1930s	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

A NE-SW striking lode in Ordovician Lower and Upper Van formation grits and mudstones with galena, barytes and witherite mineralisation.

**Workings**

These consist of two shafts east of Bryntail Farm at SN92308716 and SN92478724. There are trial shafts/opencuts at SN92628730 and SN92858741.

**Transport**

No evidence.

**Power**

Foundations of the 20" pumping/winding engine house were situated close to the engine shaft. They are barely recognisable now as low earthworks in pasture.

**Processing**

A stonebreaker was apparently installed at some stage after 1870. Most of the other dressing operations were carried out on the Bryntail dressing floors. No evidence now survives for any dressing floors at the Glyn Mine.

**Other features**

There is a small reservoir at SN92108689.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Bick 1990a, 38-40

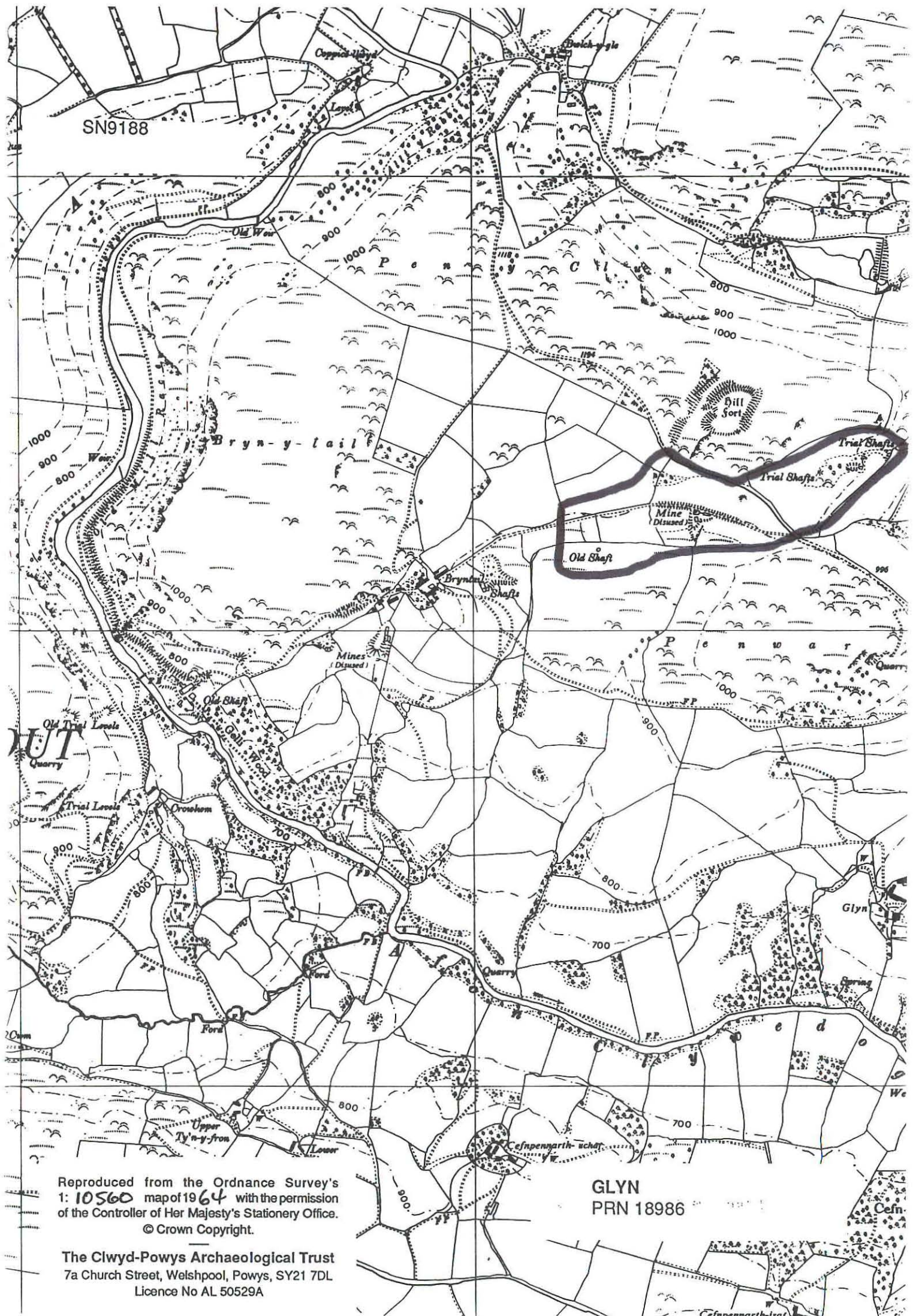
Burt et al 1990, 64

Foster-Smith 1978, 26

Ordnance Survey 1st Edition 25 inch Map XLI(15)

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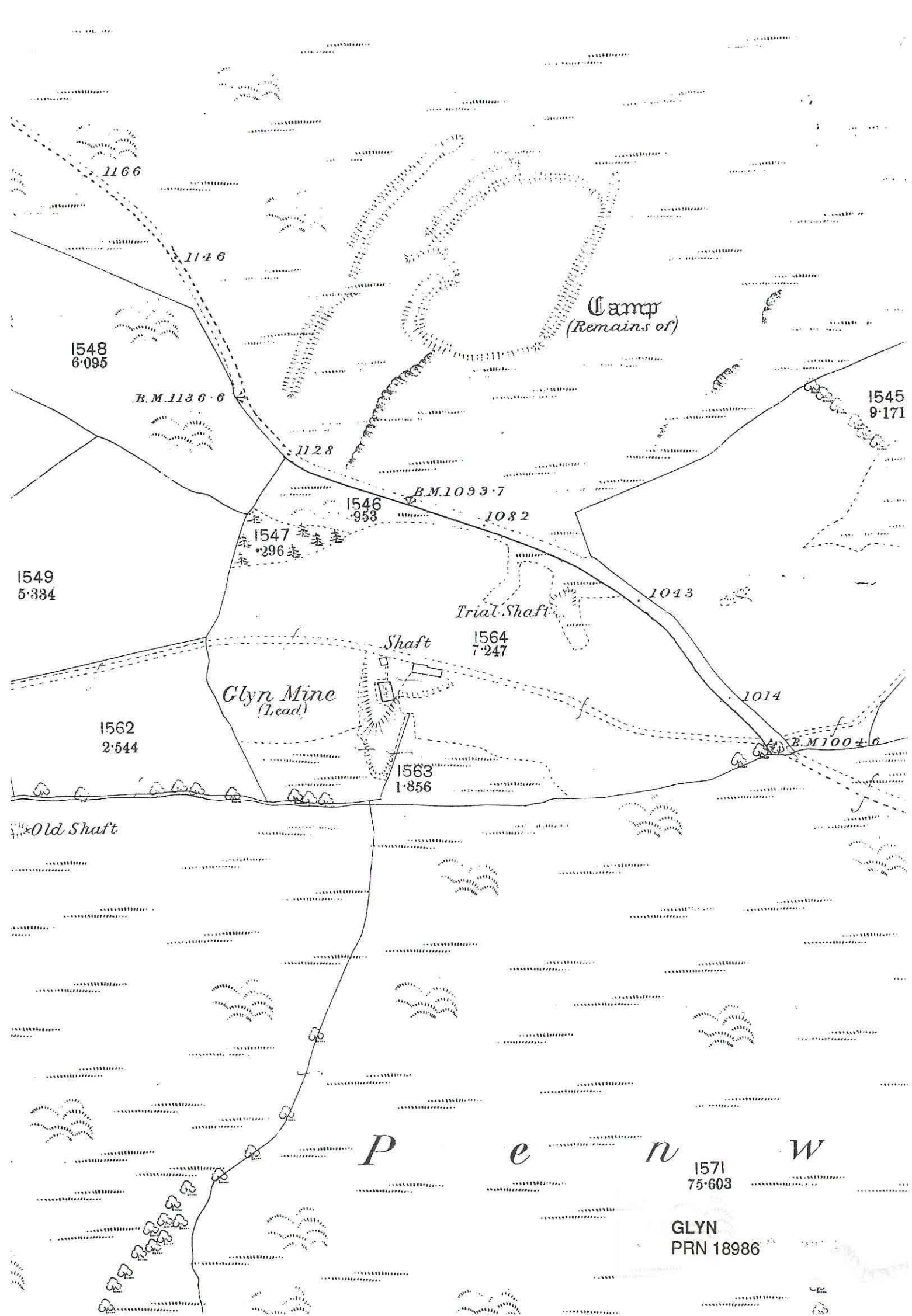


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GLYN  
PRN 18986







<b>5939</b>	<b>GORN (Lead)</b>			<b>NGR</b>	<b>SN98008400</b>	<b>SN98SE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			<b>230 mOD</b>
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	1845-1856	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry/Pasture	

**Geology**

The vein trends east-west and outcropped on the eastern slopes of Gorn Hill in Silurian rocks of the Frongoch formation. Mineralisation includes galena with zincblende with barytes.

**Workings**

Stoping up to the surface is drained by a deep adit from the east. A ventilation shaft is situated at the top of the hill at SN98138403.

**Transport**

No evidence.

**Power**

A water powered air pump distributed air by means of wooden pipes. A single covered waterwheel drove the crushing machinery. The wheel is described as a 20ft diameter overshot type driving a single pair of smooth rolls. A leat runs up the valley to a now dry reservoir.

**Processing**

Ore bins, jiggers, a crusher, slimes pits and a washing/picking floor were present. The dressing floors are poorly preserved at the foot of the hill in an overgrown area close to the deep adit at SN98108410.

**Other features**

A counting house, smithy, mine office and storehouses were formerly in existence but only low rubble platforms remain where the buildings stood. Barracks are believed to have been situated either at Cwm or Newchapel but these were almost certainly prefabricated structures and no surviving remains could be found.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals for shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

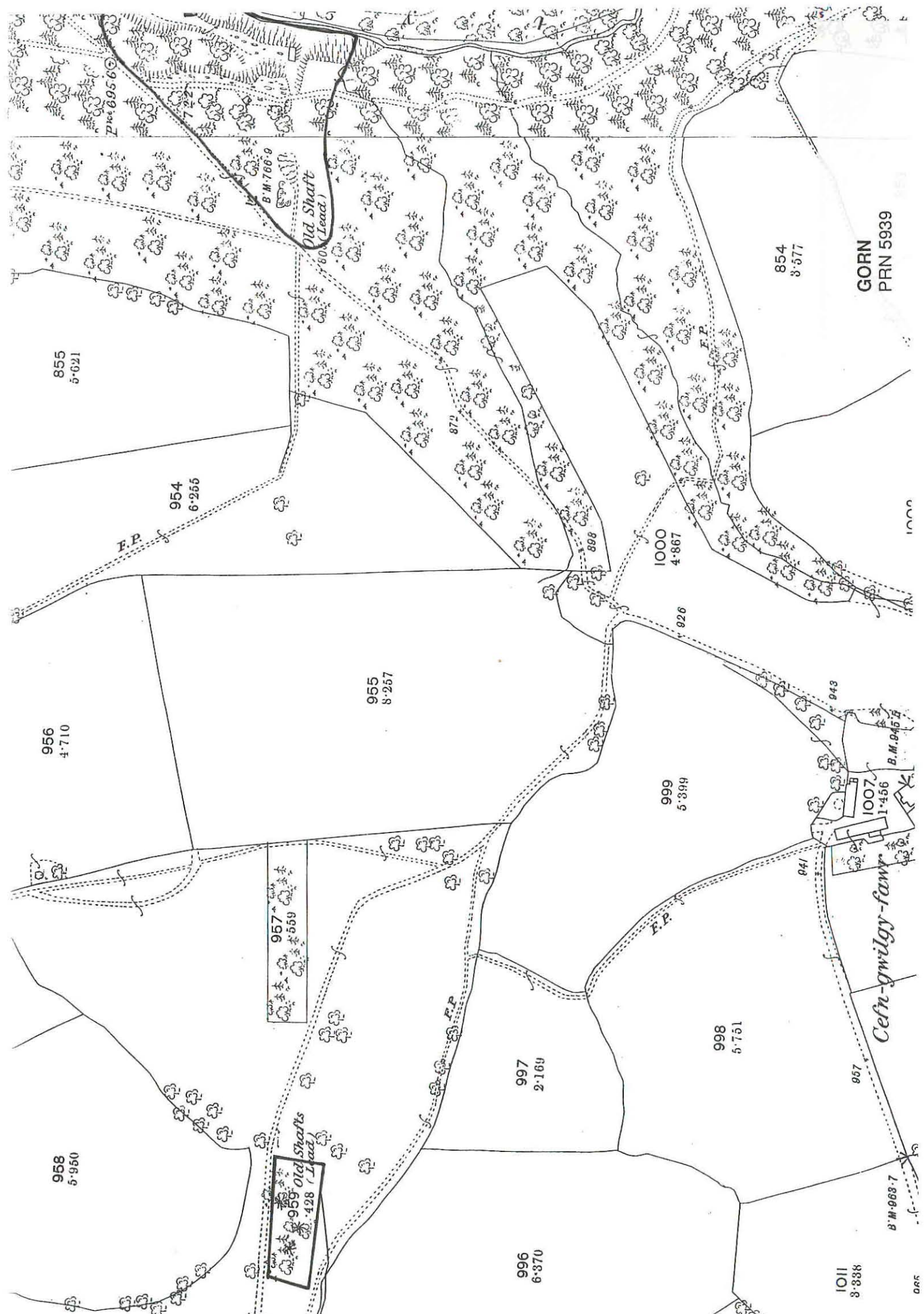
**References**

Bick 1990a, 47  
 Bick 1991a, 5-10  
 Foster-Smith 1978, 30  
 Jones & Moreton 1977, 15  
 Jones 1922, 173  
 Ordnance Survey 1st Edition 25 inch Map  
 Ordnance Survey 2nd Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993









GORN  
PRN 5939

Cefn-gwilyg-fawr

B.M. 968.7

1011  
8.338

0.65



**8487 GWAITH Y MWYN (Silver/Lead)****NGR**

SN949701

SN97SW

<b>District</b>	Radnorshire	<b>Community</b>	Rhayader			<b>0</b>	<b>mOD</b>
<b>Form</b>	Documents	<b>Condition</b>	N/A	<b>Date</b>	1640s		
<b>Threat</b>	N/A	<b>Status</b>	None	<b>Land use</b>	N/A		

**Geology**

N/A

**Workings**

N/A

**Transport**

N/A

**Power**

N/A

**Processing**

N/A

**Other features**

N/A

**Recommendations**

As this mine is unlocated no recommendations are made at this time.

**References**

Bick 1991a, 60-61

Lewis 1967, 69

Regional SMR: Clwyd-Powys Archaeological Trust 1993

Williams 1905



<b>5943</b>	<b>GWESTYN (Copper/Lead)</b>			<b>NGR</b>	SN89408610	SN88NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			340 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Pre 19th century/1855-1866	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Lower Silurian Gwestyn Formation. The Van lode has been exploited on a vein striking ENE. Mineralisation includes a calcite gangue with chalcopyrite and rare galena, sphalerite, chalybite.

**Workings**

Young's shaft and Pearce's shaft, both filled in, can be seen in the main area of mining activity on the top of the hill at SN89528612. There are numerous trials on the hillside close to the main shafts which take the form of shallow shaft-mound type workings. Two shafts are located in the field to the north at SN89708630. The latter shafts were drained by adits to the north.

**Transport**

There are an immense number of trackways crossing the site many of which appear to pre-date the mining activity. The majority are aligned east-west along the top of the ridge while others ascend the northern slopes from the valley bottom. These features are best viewed on aerial photographs. It is possible that some of the banks and ditches relate to mine trackways and leats but the majority are probably of unrelated earlier and later traffic activity.

**Power**

A 30ft waterwheel was used for pumping and drawing. The power source was the Gwestyn Brook. A masonry wheelpit can be seen in a hollow close to the present Llanidloes road and probably relates to the above.

The first edition map appears to show a pumping engine with flat rods extending to a shaft (probably Pearce's) at SN89608611.

Leats and two associated small reservoirs were recorded on the hillside at the time of the field visit.

**Processing**

No obvious remains other than jigger waste on the spoil tips and areas of manual rock breaking defined by waste rock in sorted heaps.

**Other features**

A possible two-roomed mine office is shown on the first edition 25" OS map.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

**References**

Bick 1990a, 34  
 Bick 1991a, 11-17  
 Foster-Smith 1978, 24  
 Jones & Moreton 1977, 16  
 Jones 1922, 47  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

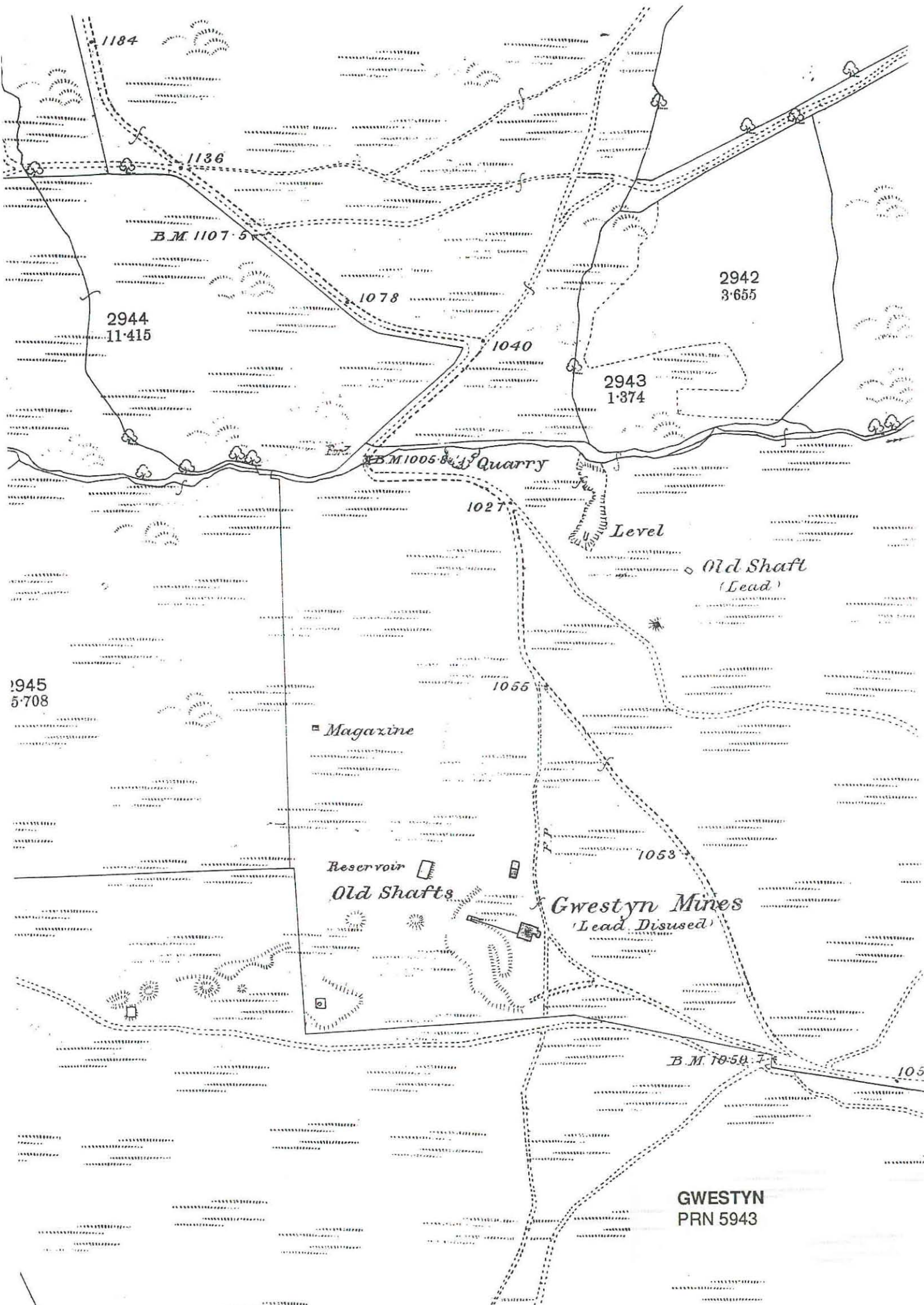
**Photographs**

CPAT CS93/26/03-06  
 RCAHMMW 92/CS/1568-1573  
 RCAHMMW 925100/52-54  
 RCAHMMW 925089/64-69











<b>18987</b>	<b>HAFODFEDDGAR (Copper/Lead/Zinc Trials)</b>			<b>NGR</b>	SN87558585	SN88NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			250 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	1846-1869	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian Gwestyn shales with iron, lead, zinc and copper mineralisation.

**Workings**

Five levels and numerous trial pits are reported here. The levels are all run-in and the trials can still be discerned in low sunlight.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Bick 1990a, 32

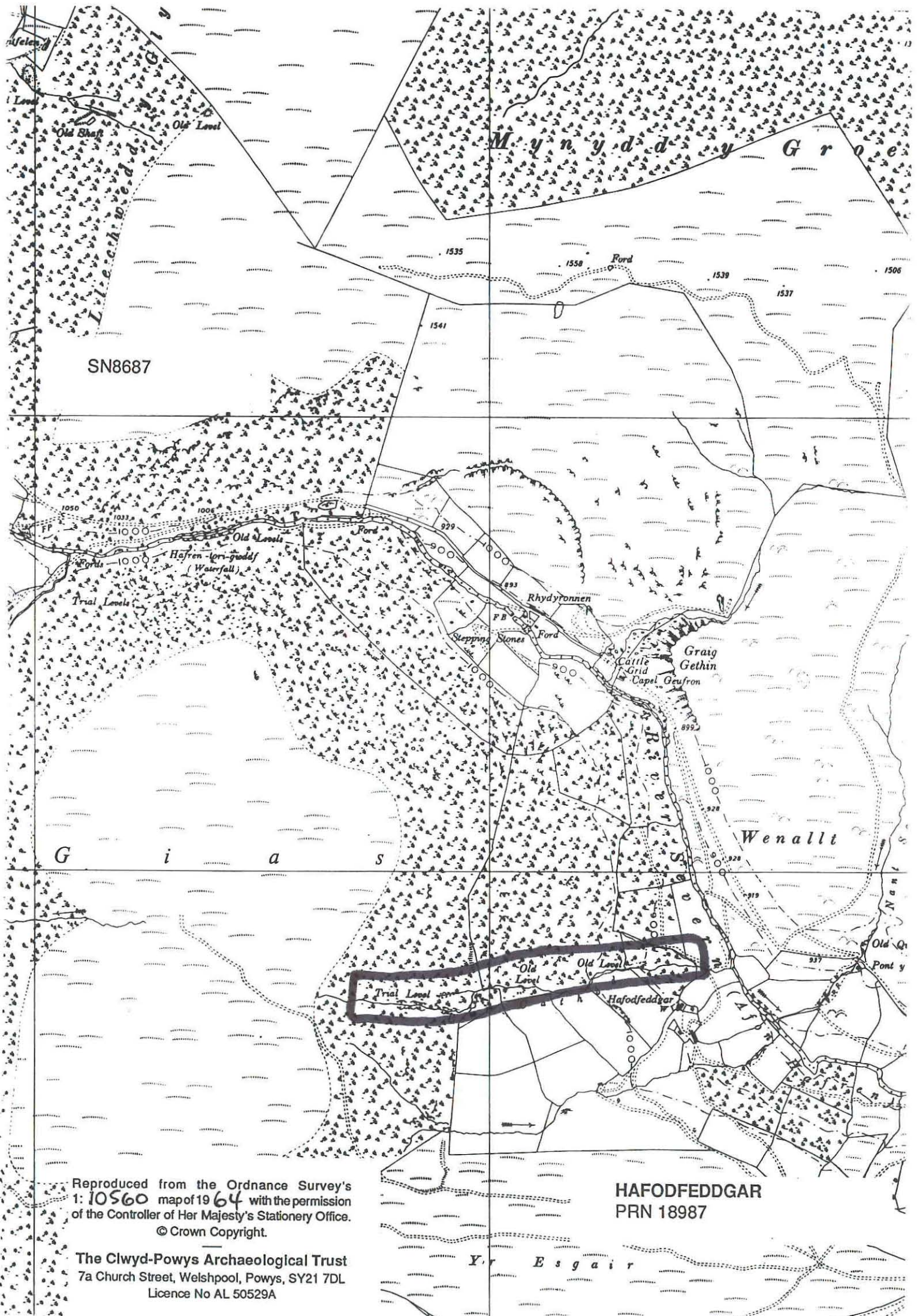
Foster-Smith 1978, 23

Hamer 1872, 26

Ordnance Survey 1st Edition 25 inch Map XLVII(1)

Regional SMR: Clwyd-Powys Archaeological Trust 1993



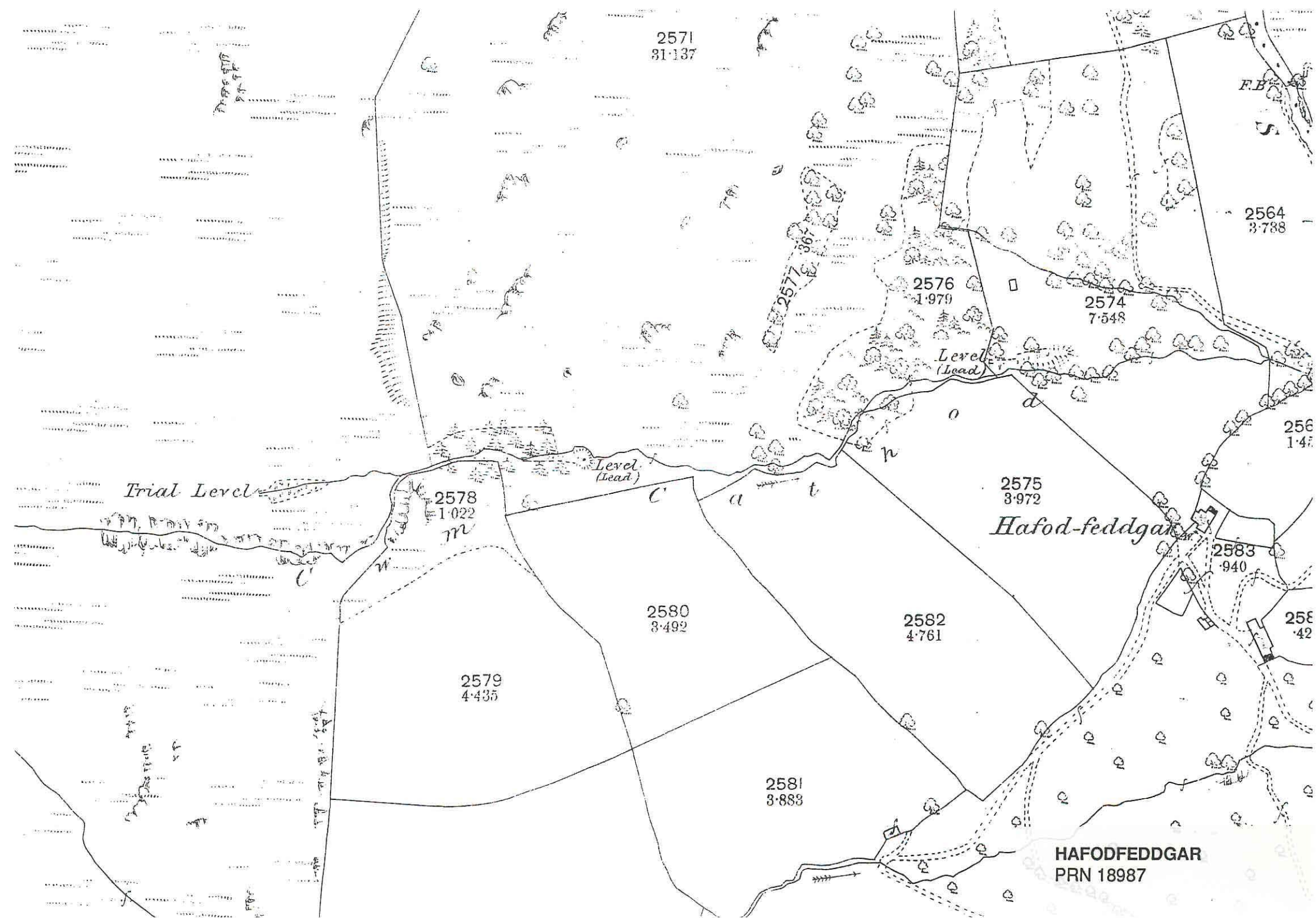


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**HAFODFEDDGAR**  
PRN 18987

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<b>6158</b>	<b>HYDDGEN (Lead)</b>			<b>NGR</b>	SN78209070	SN79SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			400 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	1873-1880s	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry	

**Geology**

Ordovician Ashgill-Caradog shales and sandstones. The lead vein strikes NE-SW as a continuation of the Dylife lode. Mineralisation includes lead and copper.

**Workings**

The main level is on the east side of the valley near the mine office. Four shafts are visible on the west side of the valley. There are various trial levels opencuts and shafts on the hillsides to the west, south and east of the dressing floors at SN78209070.

**Transport**

There is a small stretch of tramway leading from the run-in level east of the mine office building. Some rails also exist close to the main shaft south-west of the mine office.

**Power**

A leat approaches from the north to the 40ft (9mx1.2m) pumping and winding waterwheel near the level on the east side of the stream at SN78349080.

**Processing**

A crusher house was presumably present on the dressing floors but no remains can be seen. The dressing floors overall are poorly preserved.

**Other features**

A mine office building is to be seen near the level on the east side of the stream at SN78249080. Externally it measures 24x8m with three possible entrances and a 0.5m thick walls. An iron rail can be seen in the rubble of the building measuring 0.2m long.

**Artifacts**

Tram tracks on spoil tip of the main shaft to south west of existing mine building. Cast iron rising main exists within shaft.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

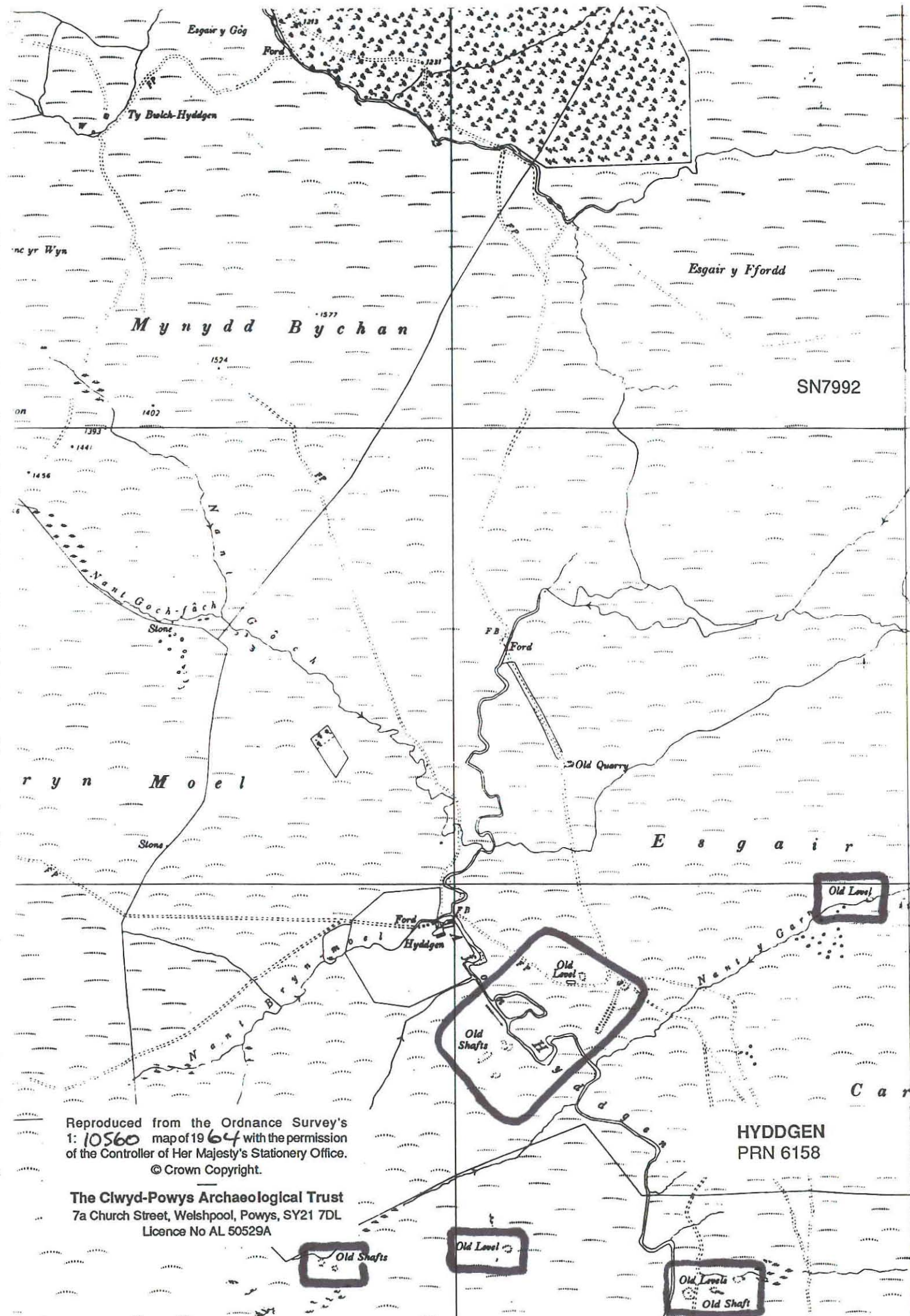
**References**

Bick 1990a, 6  
 Foster-Smith 1978, 13  
 Jones & Moreton 1977, 16  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 92/CS/1649-1651

RCAHMMW 925098/45-47



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HYDDGEN  
PRN 6158



<b>18978</b>	<b>LLANDRINDOD (Lead)</b>			<b>NGR</b>	SO06605935	SO05NE
<b>District</b>	Radnorshire	<b>Community</b>	Llandrindod Wells			265 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Roman ?/1780 ?-1872	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

### Geology

Intrusive igneous greenstones with galena, zinc and calcite gangue mineralisation. The main lode strikes north-south.

### Workings

There are at least twelve filled shafts of varying size. Some of these shafts were clearly only shallow trials on the lode. The deepest shafts were located at SO06625938.

There is one clearly identifiable blocked level with a spoil heap below at SO06715963.

Trial shafts in the form of shaft-mounds can be traced as far north as SO06695985.

At SO06495955 in the bottom of the valley to the west of the mine there is a wide ditch up to 1.5m deep with boulders at the east end and a water-course in its base which appears to issue from a blocked adit. Although not mentioned in Hall's (1993) notes on the mine, this would appear to be a blocked deep adit for the main shaft above.

To the south of the main mining area on the hillside north west of Llwynceubren Farm are numerous dispersed early workings in the form of blocked trial shafts and possible levels or opencuts. Many of these have been wholly or partly destroyed by land improvement for pasture. It is possible that some of the mounds of particularly weathered boulders relate to prehistoric clearance cairns rather than mined waste. The main concentration of these features is in the field centred on SO06575903.

### Transport

No evidence.

### Power

No evidence.

### Processing

In the valley bottom to the west of the mines there is a small processing area at SO06425957 which consists of a heap of mine waste and tailings on top of which is a single-roomed building with basal survival of the dressed block foundations and a southern doorway.

Amongst the waste on the west side of the building was a block with a shot hole indicating a post-medieval date. A few yards to the north is a small reservoir with a connecting leat running from the adit cutting. The function of the reservoir is not known unless it was used to fill manual jiggers with water on the processing area. It is assumed that this processing area relates to the eighteenth century mining phase.

On the main area of mining there is evidence for manual primary dressing of the mined rock in the form of sorted crushed stone. A few yards to the south of the main shaft are the low earthworks of a square enclosure approx 6x6sq m. which may be related to a former processing area.

### Other features

No evidence.

### Recommendations

The nature of mineralisation is of geological importance and protection for the mine workings may therefore be possible via designation as an SSSI. However, the mine is of importance in itself in being geographically isolated from the main western Montgomeryshire orefield and because of its potentially great age. It is therefore recommended that the mine workings and dressing floor areas should also be considered for protection by scheduling as an ancient monument.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

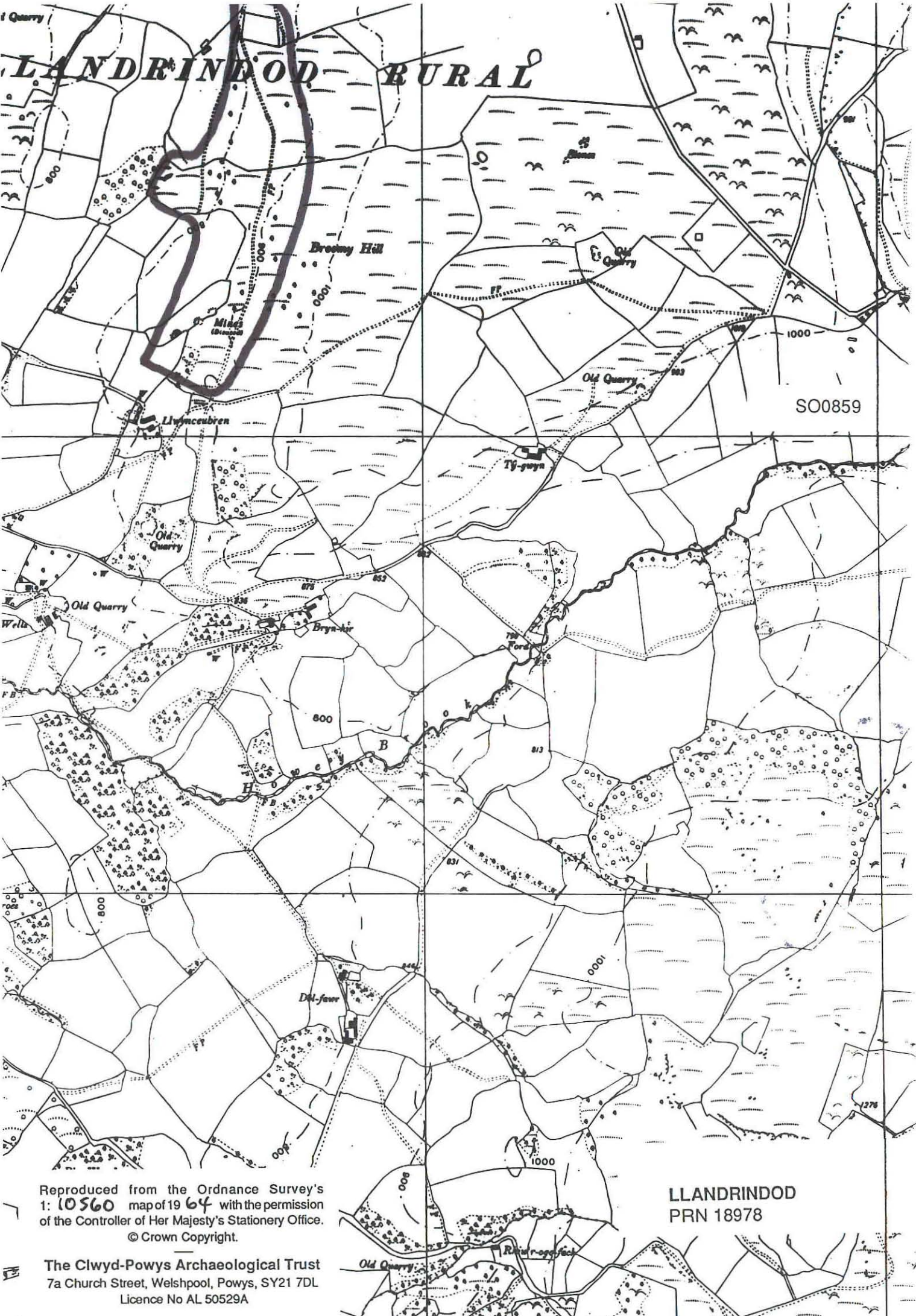
A detailed measured surface survey of the surviving earthworks and structural features is recommended.

### References

Hall 1993, 82

Ordnance Survey 1st Edition 25 inch Map  
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LLANDRINDOD  
PRN 18978



<b>5941</b>	<b>LLANERCHYRAUR (Lead)</b>			<b>NGR</b>	SN86759820	SN89NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			250 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	18th century/1852-1881	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian mudstones and grits of the Frongoch formation. The lead veins strike ENE-WSW. The two main lodes include the Tyisaf and Llanerchyrour lodes. Galena is present in the shales.

**Workings**

Extensive workings are visible over the hillside of Llanerchyrour on the main lode at SN86699811 including a deep adit SN86789820, two shafts on the top of the hill, and 6 levels. Two other levels were driven on the Tyisaf lode to the east. There are numerous shallow trials in the vicinity.

**Transport**

Tramway track beds are visible on the dressing floors and leading to the deep adit.

**Power**

Two reservoirs were constructed for driving dressing machinery (now Llynau Cae Conroy) at SN86759825 and SN87009810. A long leat runs in to the mine from the Ceulan Valley. A wheelpit is located to the north of Tyisaf Farm SN87959818 which accommodated a 50ft pumping waterwheel that drove pumps at Tyisaf Engine shaft via 300yards of flat rods. It later pumped Llanerchyrour by a mile long rope.

Other smaller wheelpits drove the buddles at SN98078774 and a larger wheel operated the crusher house at the same NGR.

**Processing**

A lower dressing floor with the Tyisaf winding wheelpit, jigger/picking table platform, round buddles and slime pits is shown on the 1887 25" OS Map at SN86789819.

The upper dressing floor consists of a crusher house, jigger shed base, four buddles, mine office, smithy, storehouses, and basal remains of the 1951 processing mill centred on SN87729808.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

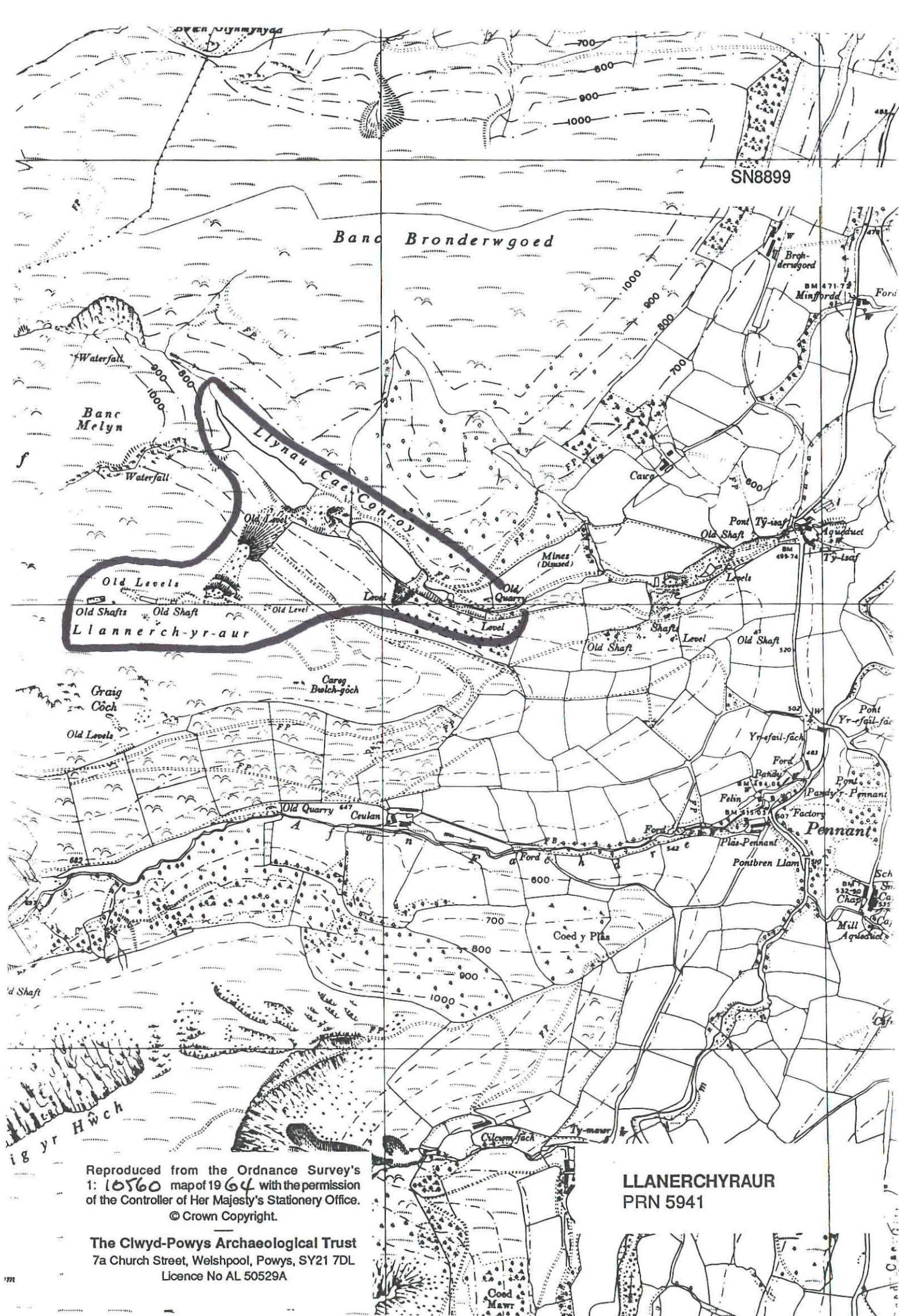
**References**

Bick 1990a, 23-26  
 Bick 1991a, 29-30  
 Foster-Smith 1978, 14  
 Jones & Moreton 1977, 16  
 Jones 1922, 4, 151  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 92/CS/1625  
 RCAHMMW 925095/50,52-54



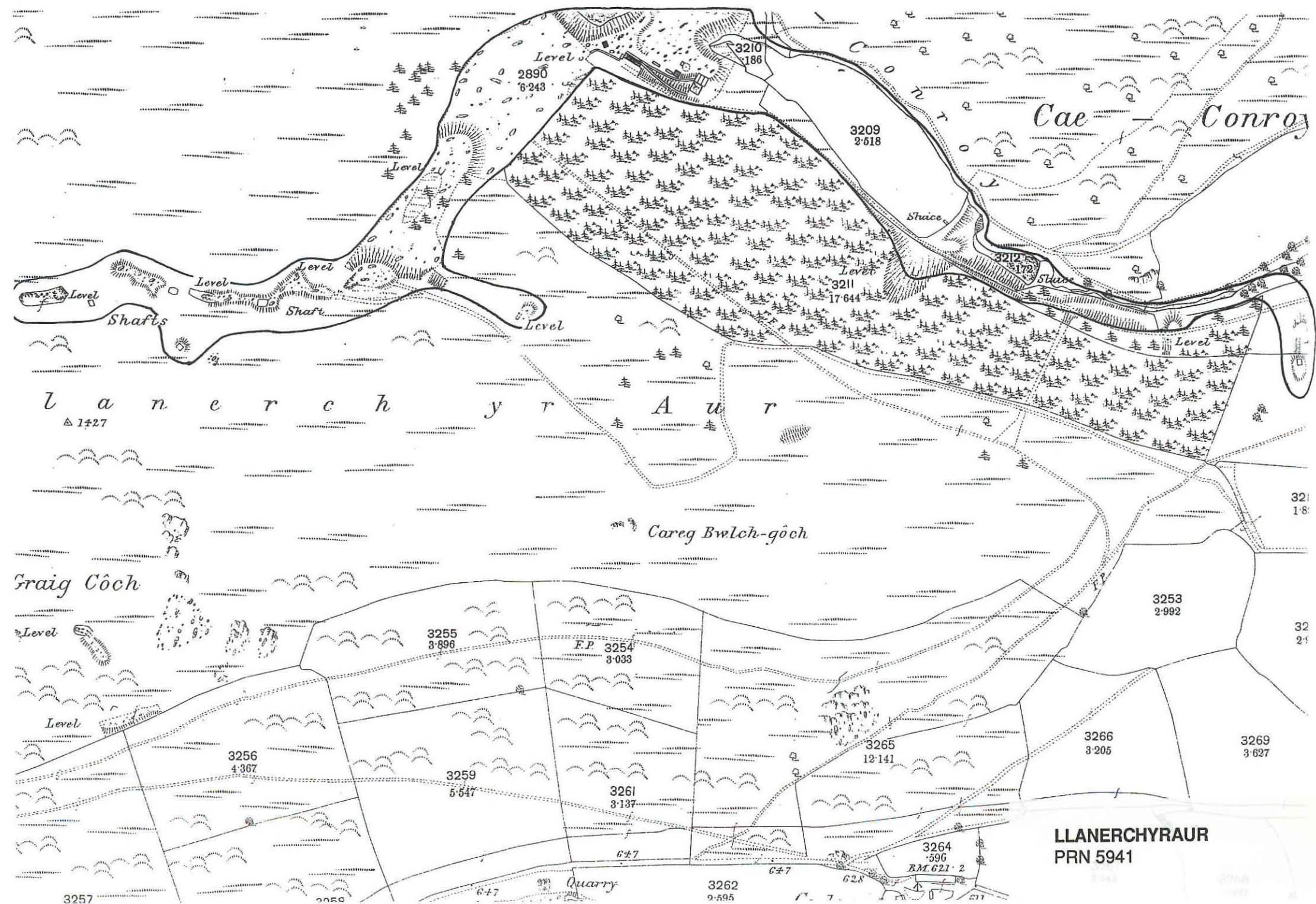


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LLANERCHYRAUR  
PRN 5941







<b>8433</b>	<b>LLANGYNOG (Lead)</b>			<b>NGR</b>	<b>SJ05502555</b>	<b>SJ02NE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangynog			<b>200 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	1692-1869	
<b>Threat</b>	Reclamation/Quarrying	<b>Status</b>	None	<b>Land use</b>	Quarry (disused)/Pasture	

### Geology

The main vein strikes E-W and divides metamorphic rocks to the south and igneous to the north. The vein splits into two branches on the western side.

Mineralisation includes galena with gangues of slate and igneous rock together with quartz and copper carbonates.

### Workings

There are four levels, six shafts, a number of level trials on the top of the hill at SJ05482559 and opencuts at the top of the quarry which probably mark the position of the earliest workings at SJ05322558. Some shaft-mound trials were noticed in the field immediately west of the dressing floors at SJ05102550.

### Transport

No evidence.

### Power

Leats running from the watershed to the west fed the reservoir known as Llyn Y Mynydd at SJ00802510 from where leats traversed the hillside down to the dressing floors. Two more storage reservoirs are located on the dressing floors at SJ05502560.

A pumping and crushing waterwheel pit formerly existed on the dressing floors but has since been infilled. The foundations of the 1871 engine and boiler house can still be seen in an overgrown plot close to the road at SJ04982565 along with the chimney base.

### Processing

All surface evidence of the dressing floor structures has been destroyed by recent quarrying of the area for roadstone. Two poorly preserved round buddles are all that is left and they will probably be destroyed by continuing small-scale removal of stone for local use.

### Other features

There is an 18th century magazine above the quarry at SJ05542566 which consists of 2 concentric walls, a single doorway, and windows. A small tree is growing between the two walls on the western side and will ultimately cause collapse.

Many local houses nearby are associated with the mine, eg. Ty Newydd (SJ05262555) which dates to 1708 and was used as a mine managers office. Workshops and storerooms are located to the north of Ty-Newydd and are very ruinous (SJ05252560).

Evidence of post-medieval bole hill smelting may be demonstrated by the finding of heavy ferrous vesicular slags near the southern extent of the mine close to Rock level at SJ05402553.

### Recommendations

The double concentric walled magazine foundations are a rare survival in the Powys orefield and should be preserved. This features should be recommended for scheduling as an ancient monument and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

A detailed measured survey of the magazine structure should be carried out.

### References

Bick 1990a, 25-32  
 Foster-Smith 1978, 6  
 Lewis 1964  
 Ordnance Survey 1st Edition 25 inch Map IV(12)

Regional SMR: Clwyd-Powys Archaeological Trust 1993

Williams 1985, 21-74

Wren 1968, 115-138

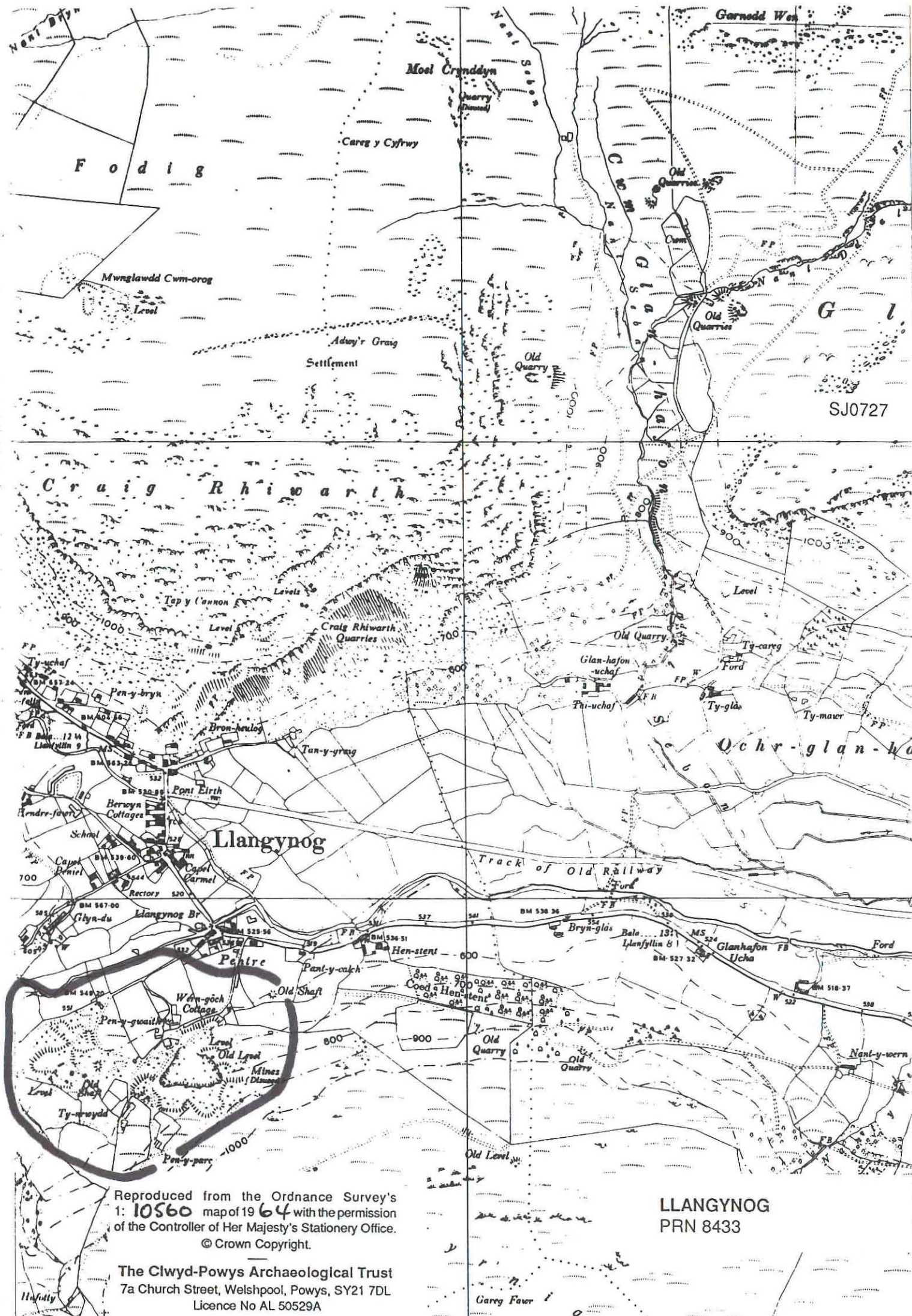
**Photographs**

CPAT 147.01-36

CPAT CS92/14/01-36

RCAHMMW 935097/56-58



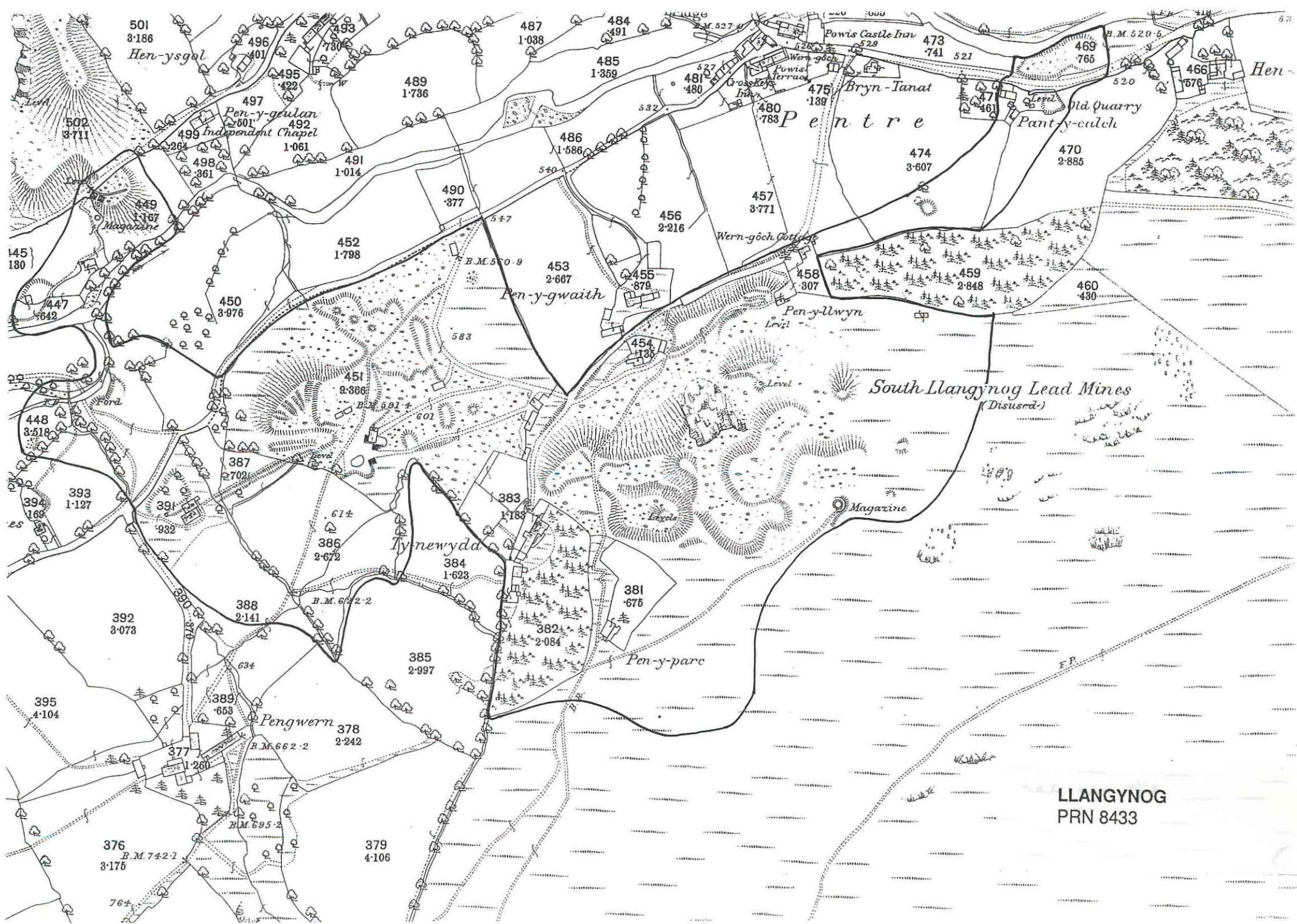


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LLANGYNOG  
PRN 8433







<b>18971</b>	<b>LLANYMYNECH (Lead/Copper)</b>	<b>NGR</b>	<b>SJ26602222</b>	<b>SJ22SE</b>
<b>District</b>	Montgomeryshire	<b>Community</b>	Carreghofa	<b>180 mOD</b>
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b> Pre-Roman ?/Roman/Medieval/19th century
<b>Threat</b>	Landscaping/Recreation	<b>Status</b>	Scheduled	<b>Land use</b> Rough pasture/Golf course

### Geology

Carboniferous limestone with veins trending NNE-SSW. The vein mineralisation includes a calcite gangue with lead and copper ores mainly as secondary oxidation products including cerussite and malachite.

### Workings

At least 10 shafts were formerly visible before landscaping together with a large number of shallow pits and shaft-mounds. The main workings include the Pit Series, Winze Series and the Ogof workings. The Winze Series at SJ26502236 consists of a long adit at SJ26582225 leading to a winze and levels while the Pit Series consists of two parallel levels which continue northwards as a line of shallow pits on the surface, still visible at SJ26472222, which appear to connect with the Winze Series workings.

In the face of the large southern quarry are three levels one of which terminates abruptly while the others continue north and connect with three shafts in the Carreghwfa workings at SJ26502186. There is a connecting quarry tunnel between the two main quarries.

Another adit runs west from the base of a quarry on the eastern side of the hill but does not continue for any great distance SJ26932219.

Another adit is believed to appear in the western cliff face and can only be reached by ropelines; its position is not confirmed.

### Transport

No evidence.

### Power

No evidence.

### Processing

Lead and/or copper processing probably took place on the hilltop as evidenced by the former reported existence of bole hill smelters and processing spoil heaps prior to landscaping for the golf course.

CPAT excavations in 1981, just inside the eastern multivallate defences at SJ26892214, revealed evidence of metalworking hearths relating to the reworking of smelted local copper ores. This activity has been dated to the second and/or first centuries BC by radiocarbon dating.

### Other features

No evidence.

### Recommendations

The whole of the interior of Llanymynech Hill is a Scheduled Ancient Monument (SAM Mg 30) and no ground disturbing works of any kind can be carried out without the required Scheduled Monument Consent.

Where development is proposed, whether under Consent or not, appropriate prior evaluation would be expected in order to frame an appropriate archaeological response.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to any proposals involving shaft capping and blocking of levels.

An aerial photographic survey in drought conditions is recommended for enhancement of surface detail.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

### References

- Adams 1992, 1-61
- Foster-Smith 1978, 8
- Map of Llanymynech Hill 1753
- Mine plans of Eastern & Western workings 1841
- Moore 1990,
- Musson and Northover 1989, 16-26
- Ordnance Survey 1st Edition 25 inch Map
- Regional SMR: Clwyd-Powys Archaeological Trust 1993







<b>30</b>	<b>LLANYMYNECH OGOF (Lead/Copper)</b>			<b>NGR</b>	SJ26602222	SJ22SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Carreghofa			180 mOD
<b>Form</b>	Earthworks/Finds	<b>Condition</b>	Intact	<b>Date</b>	Pre-Roman ?/Roman/19th century	
<b>Threat</b>	Landscaping/Recreation	<b>Status</b>	Scheduled	<b>Land use</b>	Golf course/Caving	

**Geology**

Carboniferous limestones altered to dolomites in places with mudstone bands. The main lode strikes NNE with lead & copper ores, cerussite & malachite, as secondary oxidation products.

**Workings**

The main level is entered via a cavernous entrance from which radiate a number of narrow galleries connecting small chambers.

There are numerous calcified stacked deads at least one group of which are thought to be Roman in date. Many of the small galleries are choked at the back by waste material.

The 19th c. shaft, sunk in 1823, connects to a central main chamber (the Shaft Chamber) which was clearly not accessible from the entrance chamber at this time. Many of the earliest narrow workings were widened out in at least two recognisable subsequent phases of extraction at a later date.

Some shot-holes have been recognised in the Shaft Chamber area.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

Lead smelting is perhaps evidenced by the reported former existence of 'bole hills' on top of the hill which were destroyed by the golf course.

**Other features**

No evidence.

**Artifacts**

There have been many finds from the interior of the mine since the eighteenth century, particularly from the Roman period. The finds include examples of articulated human skeletons with tools and pottery in association in both the Mandible and Burial Chambers as well as many disarticulated bones from elsewhere in the mine.

Single coins and a coin hoard (apparently buried in stacked deads in the shaft chamber) are also recorded and range in date from the first to the fourth centuries AD.

Animal bone is found in large quantities and may relate to the use of bone tools in mining. The majority however have been identified as the remains of animals which strayed into the mine and were trapped.

Two iron miner's picks found in 1750 can be seen in the library of Shrewsbury School.

**Recommendations**

As the mine workings are scheduled, as part of Llanymynech Hillfort (SAM Mg30), work of any kind will be subject to obtaining Scheduled Monument Consent

Where development is proposed, whether under Consent or not, appropriate prior evaluation would be expected in order to frame an appropriate archaeological response.

There is a great need for a research excavation to retrieve a section through undisturbed stratigraphy in either one of the chambers or galleries (or both) of this mine in order to obtain both dating evidence and details of the earlier characteristics of the workings themselves. This work should be carried out by a recognised professional archaeological body with experience of excavation/surveying and recording underground.

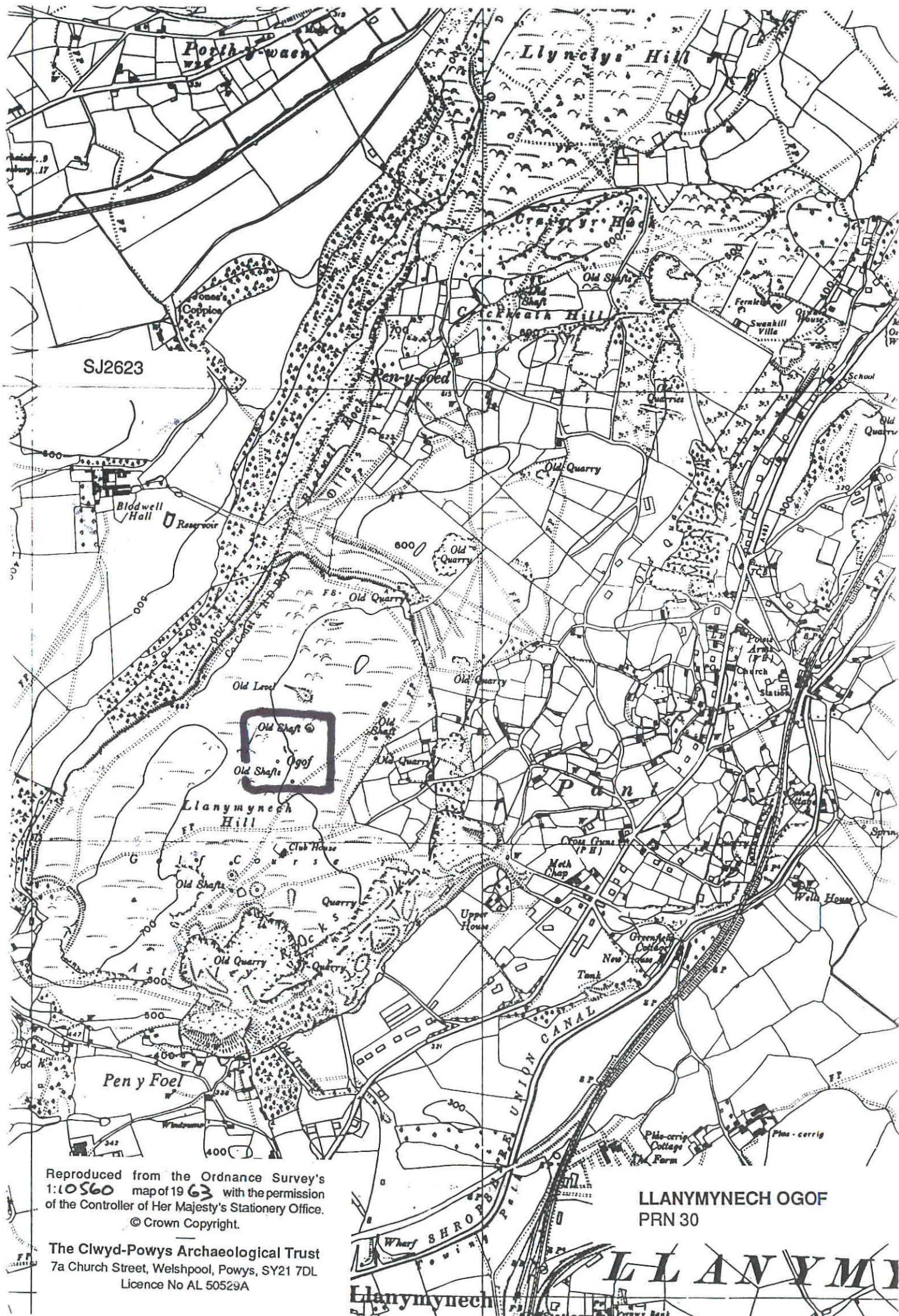
**References**

- Adams 1992, 8
- Foster-Smith 1978, 8
- Llanymynech Mine Plans 1841
- Map & Survey of Llanymynech Rock in the Township of Carreg Hofa 1735
- Ordnance Survey 1st Edition 25 inch Map



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LLANMYNECH OGOF  
PRN 30

Llanymynech

LLANMYNECH



<b>18975</b>	<b>LLWYN MADOC (Coal trials)</b>			<b>NGR</b>	SO08505515	SO05NE
<b>District</b>	Radnorshire	<b>Community</b>	Glasgwm			300 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Destroyed ?	<b>Date</b>	1816	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian shales altered by igneous intrusion.

**Workings**

Workings are mentioned in Williams (1904) but these could not be located during the site visit. A small quarry on Castle Bank displays the favourable geology for a coal trial and it is possible that the quarrying destroyed earlier openworkings.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

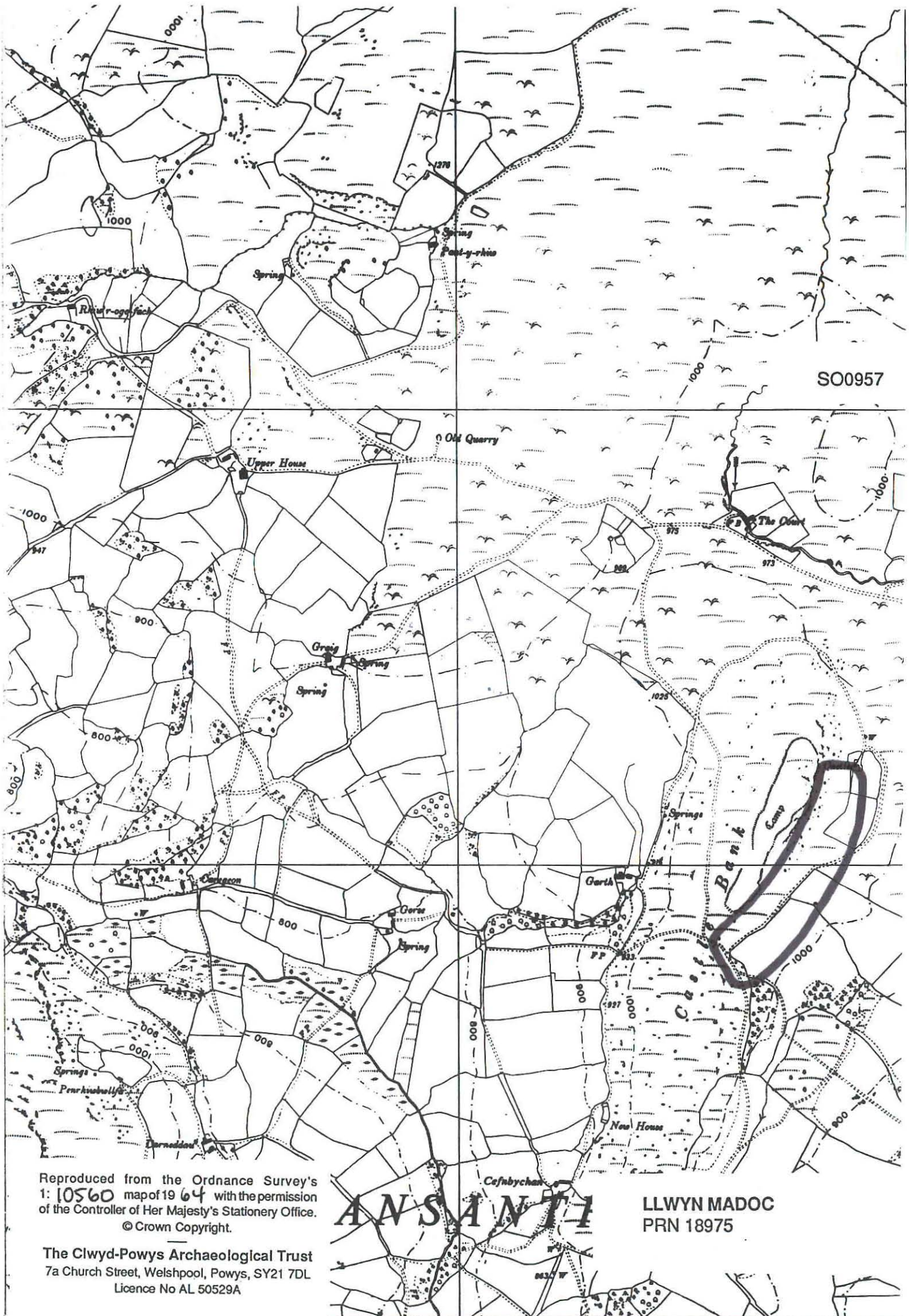
**Recommendations**

Due to the very limited nature of the archaeological remains at this site no recommendations are proposed.

**References**

Bick 1991, 69





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**ANSANTI**

**LLWYN MADOC**  
PRN 18975

<b>8458</b>	<b>MACHYNLLETH PARK LODGE/WITCHES CAVE (Lead/Copper)</b>			<b>NGR</b>	SH76050011	SH70SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Machynlleth			68 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Intact	<b>Date</b>	Prehistoric ?/Medieval/1856-1858	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian Wenlock-Ludlow series. One vein strikes E-W with a N-S cross vein containing lead and copper ores.

**Workings**

The main copper working began as an opencast 25m long by 6m wide and is known as Ogof Wyddon or the Witches Cave SH76050011. The opencast has a later shaft through its floor and a connecting adit at its base. The adit has another shaft through its floor. There is a trial level lower down the hill to the east at SH76120008. Curiously there are no obvious spoil tips associated with the mine.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Artifacts**

An iron pick and 'fish spear' together with a stone hammer, which was apparently still hafted, were retrieved from the base of the shaft which cut through the bottom of the opencast during drainage operations in 1856. At the bottom of the shaft there was also a quantity of burnt wood with evidence of burning on the shaft walls. The latter may indicate that firesetting was being used to break up the rock.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

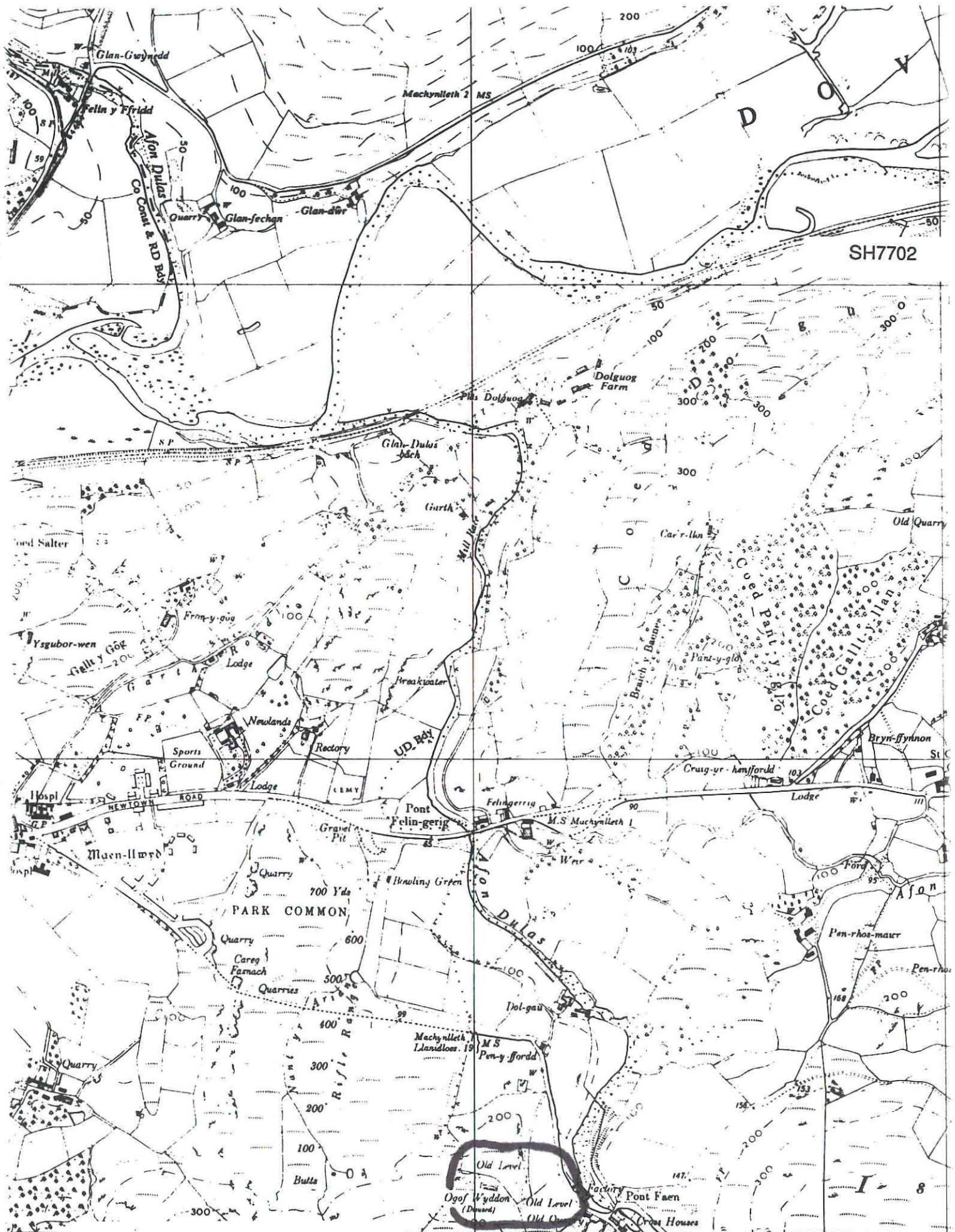
**References**

Bick 1990a, 8  
 Foster-Smith 1978, 11  
 Morris 1974, 212-6  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 925098/50



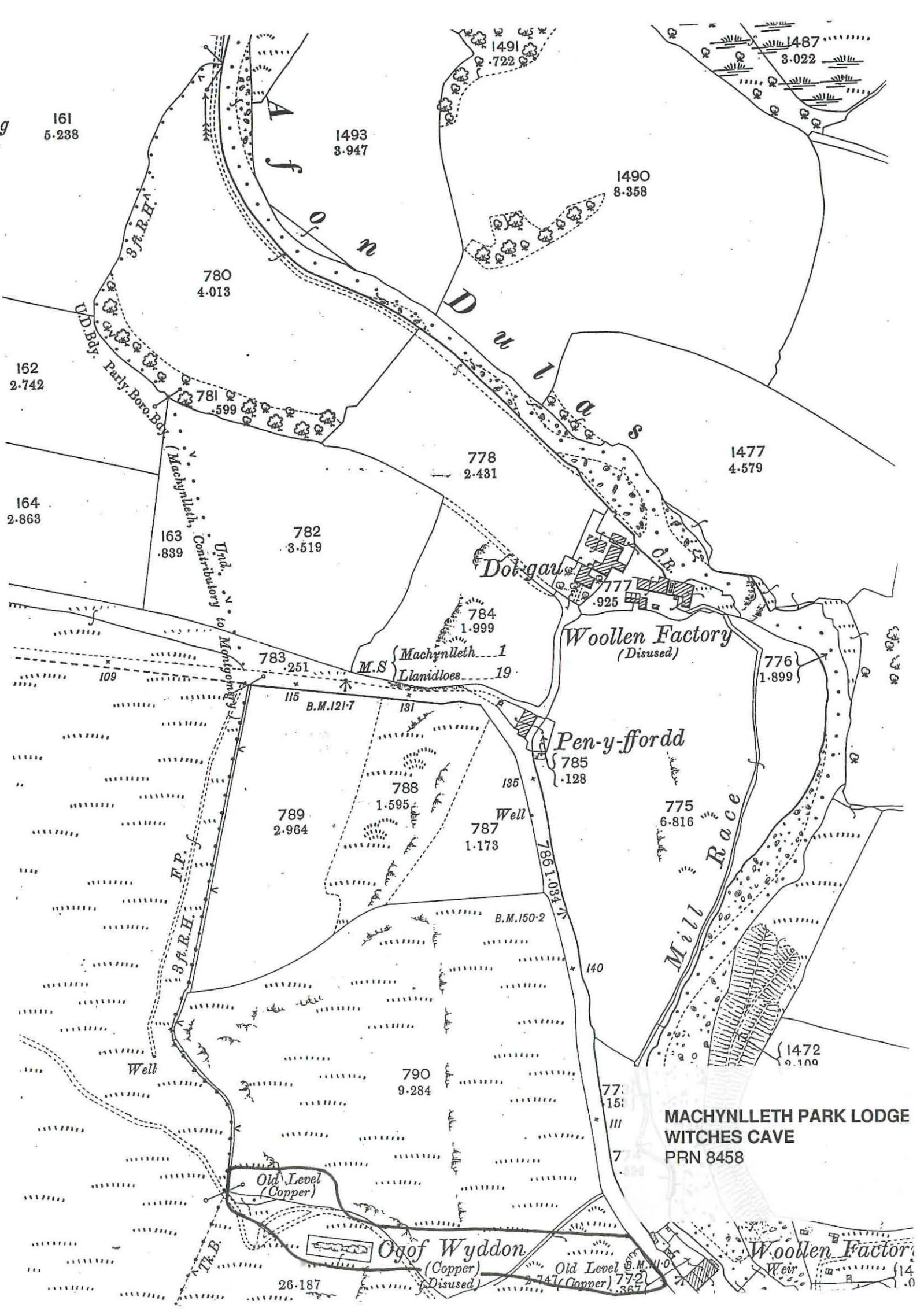


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**MACHYNLLETH PARK LODGE  
WITCHES CAVE  
PRN 8458**





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<b>18988</b>	<b>MAESNANT (Lead/Zinc)</b>			<b>NGR</b>	SN85368666	SN88NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			324 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1865/1874/1876-1878	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry	

**Geology**

Ordovician Van grits. The vein strikes east-west with galena and zinc mineralisation.

**Workings**

There is a shaft at SN85428662 on the main mine site. Lower downstream to the east are two blocked levels at SN856586670 and SN85738678. It is possible that these levels belong to the Rhyd Y Bennwch workings rather than the Maesnant sett.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

Manual processing is evidenced by sorted rock fragments on the spoil heaps and jigger tailings.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

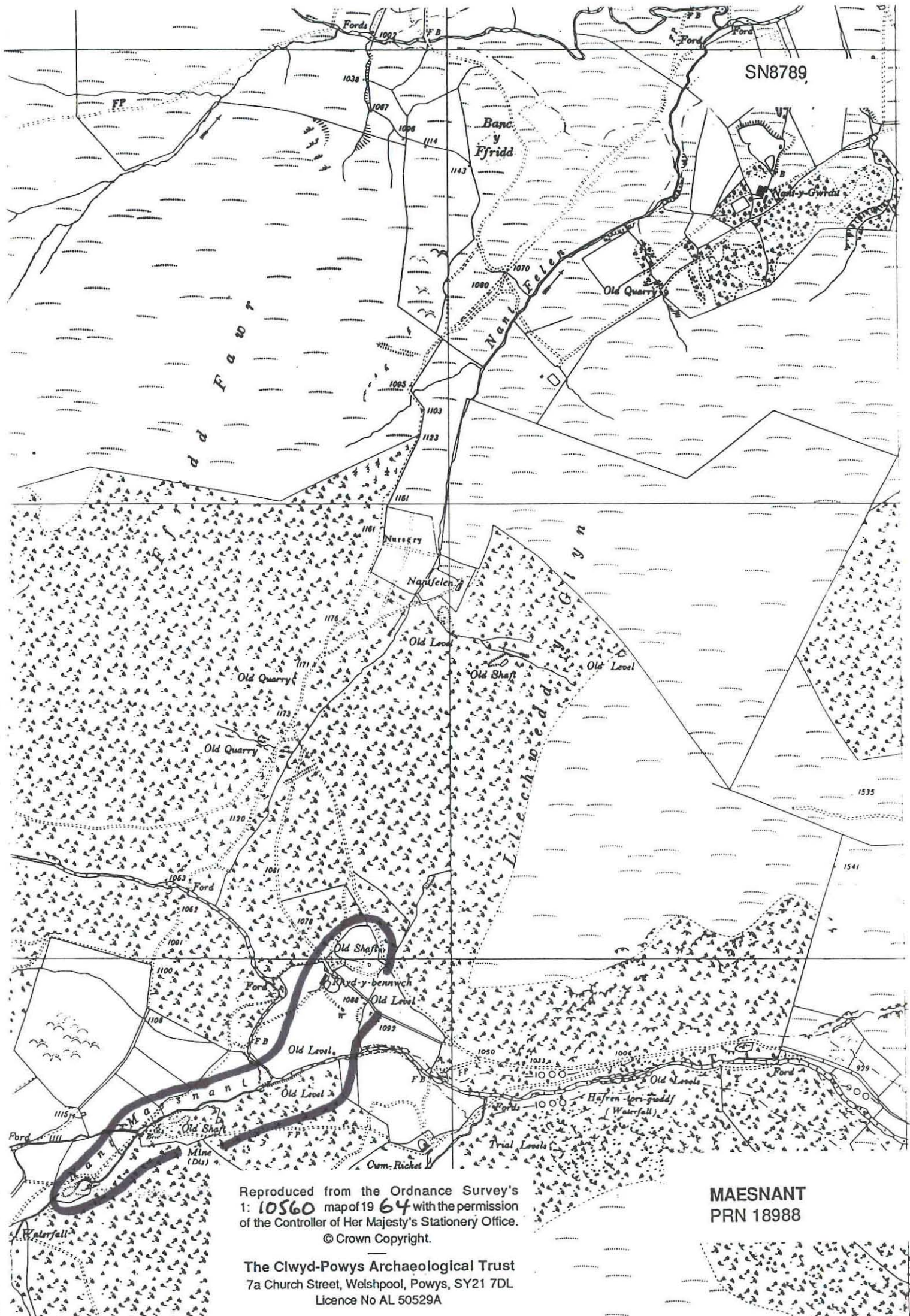
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Foster-Smith 1978, 22

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**MAESNANT**  
PRN 18988

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**18989 MARCHEINI FACH/DROSGOL (Lead trial)****NGR**

SN95657413

SN97SE

**District** Radnorshire**Community** St.Harmon

380 mOD

**Form** Earthworks**Condition** Damaged**Date** 1882-1902**Threat** None**Status** None**Land use** Pasture**Geology**

Silurian Frongoch formation geology. Two parallel lodes striking E-W. Quartz gangue with galena mineralisation

**Workings**

There is a blocked level at SN95557413 and a further blocked level and shaft at SN95557389. The linear spoil heaps display little mineralisation and no evidence of drilling or explosives was to be seen.

**Transport**

There is evidence of spoil heap tramming routes in the form of earthworks.

**Power**

A possible dam wall structure half-way between the two sets of workings may be evidenced by a wall foundation aligned E-W across the stream. It is well preserved on the east side and can be seen in the side of the stream on the west side.

**Processing**

Manual dressing is evidenced by fine tailings close to the main dumps.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

**References**

Hall 1993, 79

Regional SMR: Clwyd-Powys Archaeological Trust 1993





**18970 MELINYGLOCH (Lead trials)****NGR**

SO06649434

SO09SE

<b>District</b>	Montgomeryshire	<b>Community</b>	Aberhafesp			150 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	1868	
<b>Threat</b>	Farming./Landscaping	<b>Status</b>	None	<b>Land use</b>	Pasture/Woodland.	

**Geology**

Upper Llandoveryan Silurian black shales with no evidence of mineralisation.

**Workings**

Adit aligned SSW/NNE connecting with shaft 40m to NNE. Sub-rectangular adit mouth partially blocked measuring 1.73 x 0.80m. Waterlogged to 3ft depth. Blocked level aligned NNE/SSW at SO06509415. Another blocked level is located to the south at SO06509433.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed a pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Arx 1990, 37-41

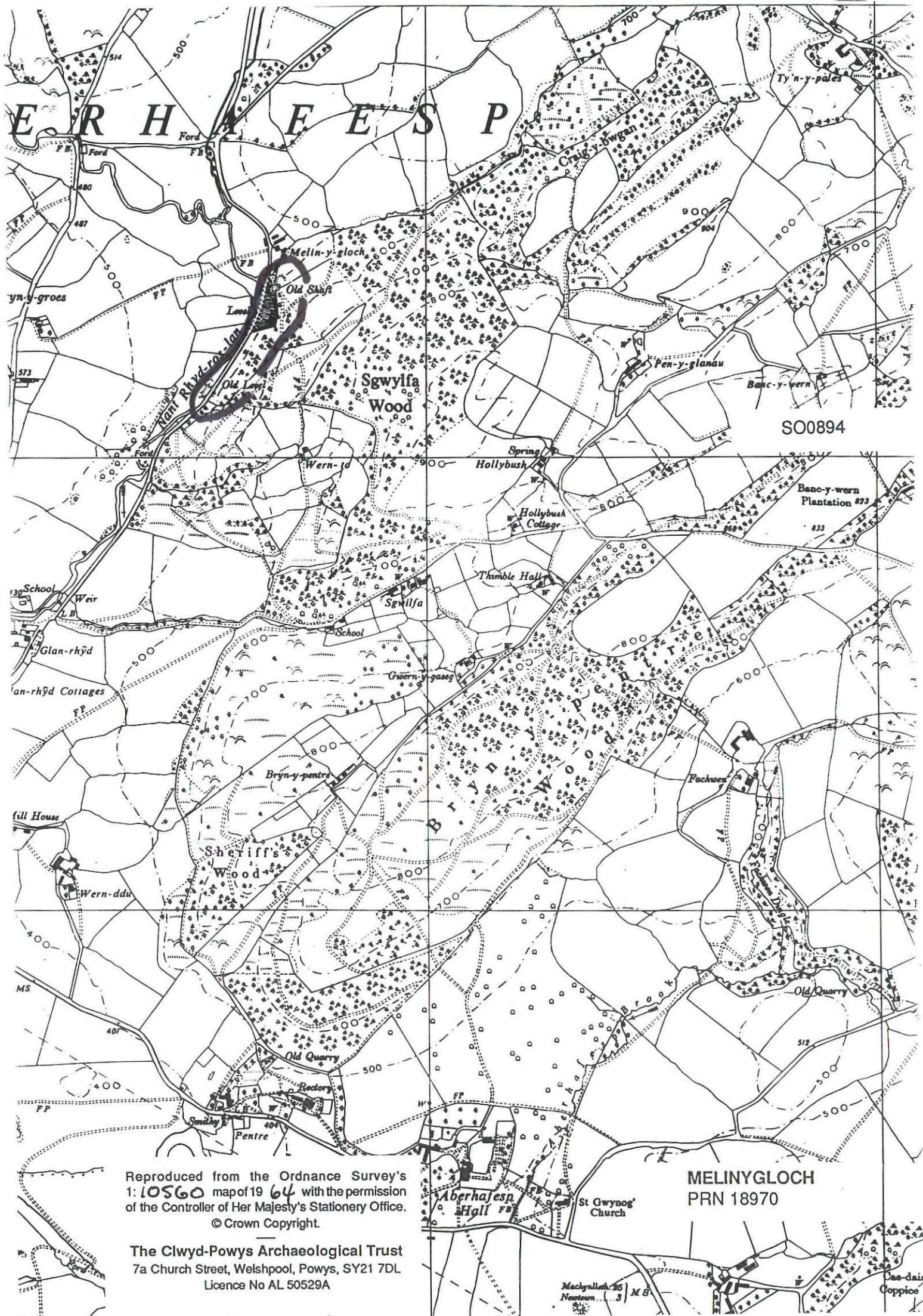
Bick 1990a, 64

Morris 1979, 114

Ordnance Survey 1st Edition 25 inch Map XXXVI(9)

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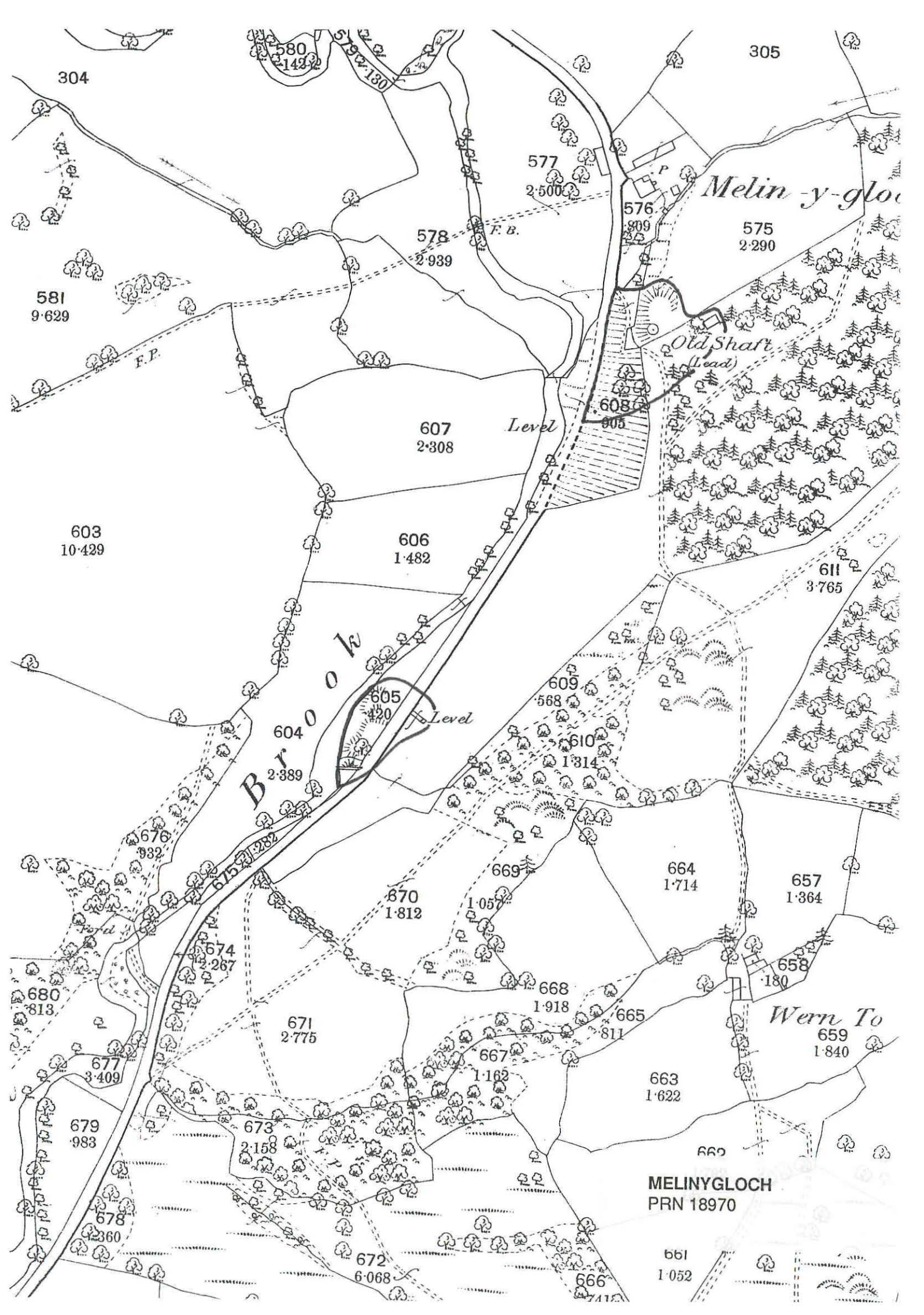




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<b>18990</b>	<b>MIDDLETOWN HILL (Lead/Barytes)</b>			<b>NGR</b>	SJ30931322	SJ31SW
<b>District</b>	Montgomeryshire	<b>Community</b>	Trewern			250 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1913-1918	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture/Woodland	

**Geology**

Ordovician shales, conglomerates and tuffs with calcite, barytes and galena mineralisation.

**Workings**

There is a shaft and level at SJ30901320 within Powys while a group of trials in the form of linear earthwork trenches are just over the border in Shropshire at SJ30951320.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

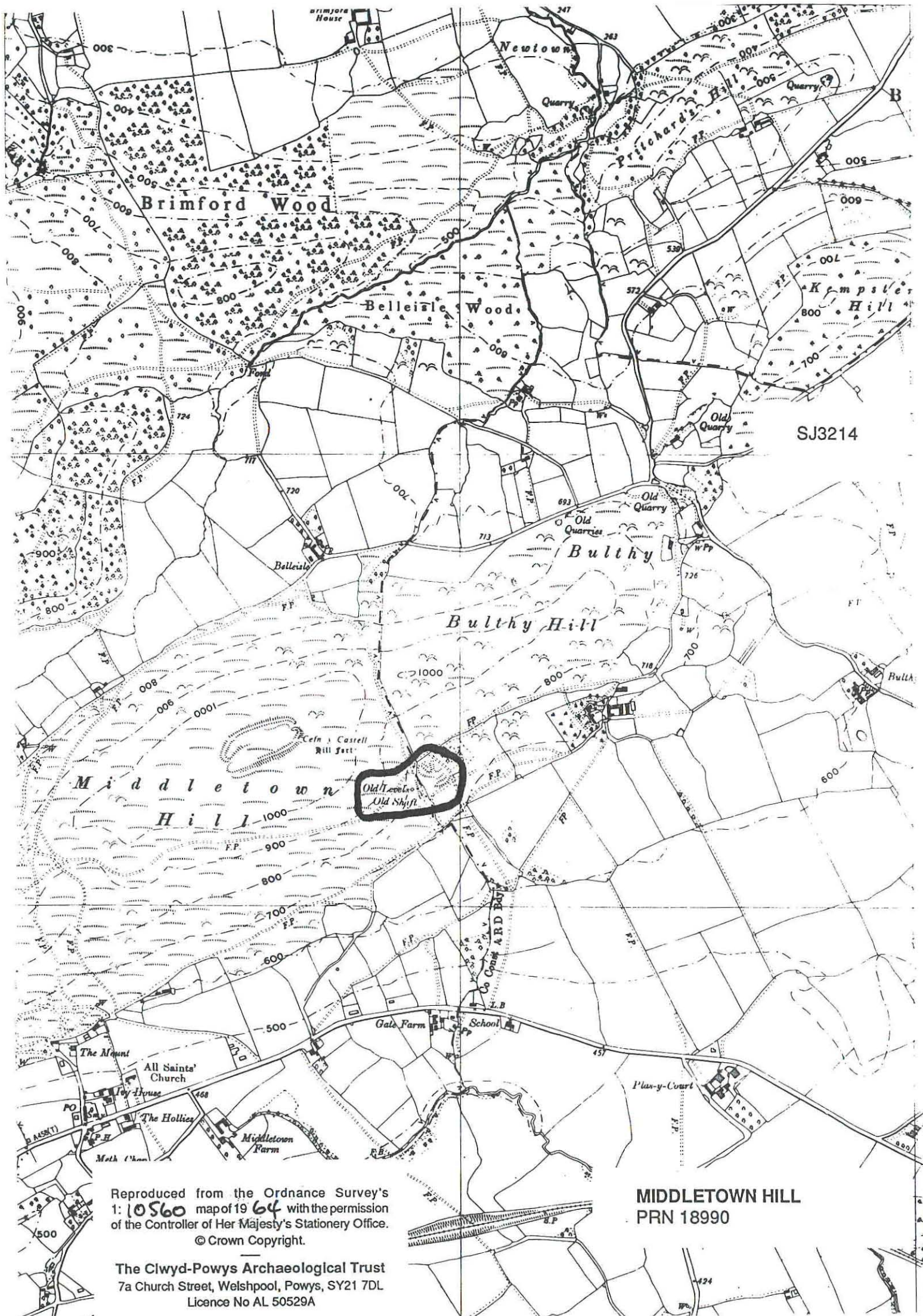
Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

**References**

Foster-Smith 1978, 9

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**MIDDLETOWN HILL**  
PRN 18990



<b>18991</b>	<b>MOEL FADIAN (Copper trials)</b>			<b>NGR</b>	SN83019490	SN89SW
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			400 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1870s/1954	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

A single east-west lode has been worked in Silurian Gwestyn Formation rocks. There is chalcopyrite mineralisation in a quartz gangue.

**Workings**

There is a single level with a winze and stoping at SN83009480. There are trial cuts on the hillside above.

**Transport**

There is an earthwork tramway track bed running out of the adit to the spoil heap.

**Power**

No evidence.

**Processing**

A single pile of extracted ore survives on the surface above the mine.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

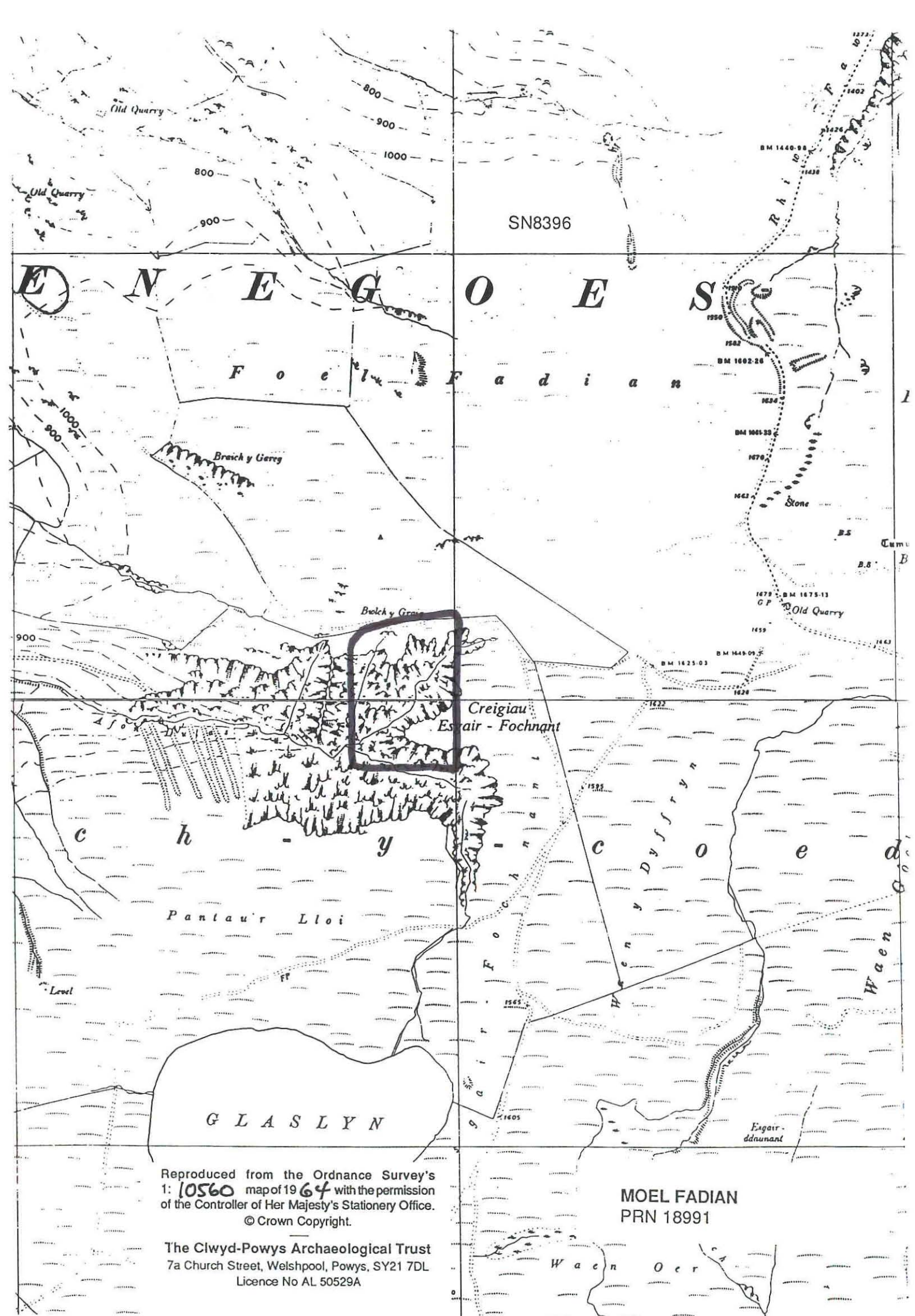
An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

**References**

Bick 1990a, 12  
 Burt et al 1990, 71  
 Foster-Smith 1978, 17  
 Jones & Moreton 1977, 18  
 Jones 1922, 174  
 Ordnance Survey 1st Edition 25 inch Map 1887  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993





<b>18992</b>	<b>NANT GYRNANT (Copper/Lead)</b>			<b>NGR</b>	SN85804740	SN84NE
<b>District</b>	Brecknock	<b>Community</b>	Llanwrtyd Wells			240 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	18th century/19th century	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

A south-west striking lode with pyrite, chalcopyrite, galena and blende mineralisation.

**Workings**

An initial opencast working was extended at a later date with two winzes through the floor and an adit at the south-western extreme. This adit is now run in. Towards the summit of Banc Y Dinas there are surface trials and a shaft which are all run in. At SN86064736 another shaft can be seen. Another level into the northern side of the Nant Gyrnant can be seen at SN86034742.

**Transport**

There is some evidence of short tramway track beds out onto the spoil tips from adits and shafts.

**Power**

An intact manual winch and pump are still intact above one of the winzes in the bottom of the opencast adit.

**Processing**

Manual processing is evidenced by crushed rock concentrations and tailings.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning, and felling proposals should avoid further disturbance to the surviving remains of the mine.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

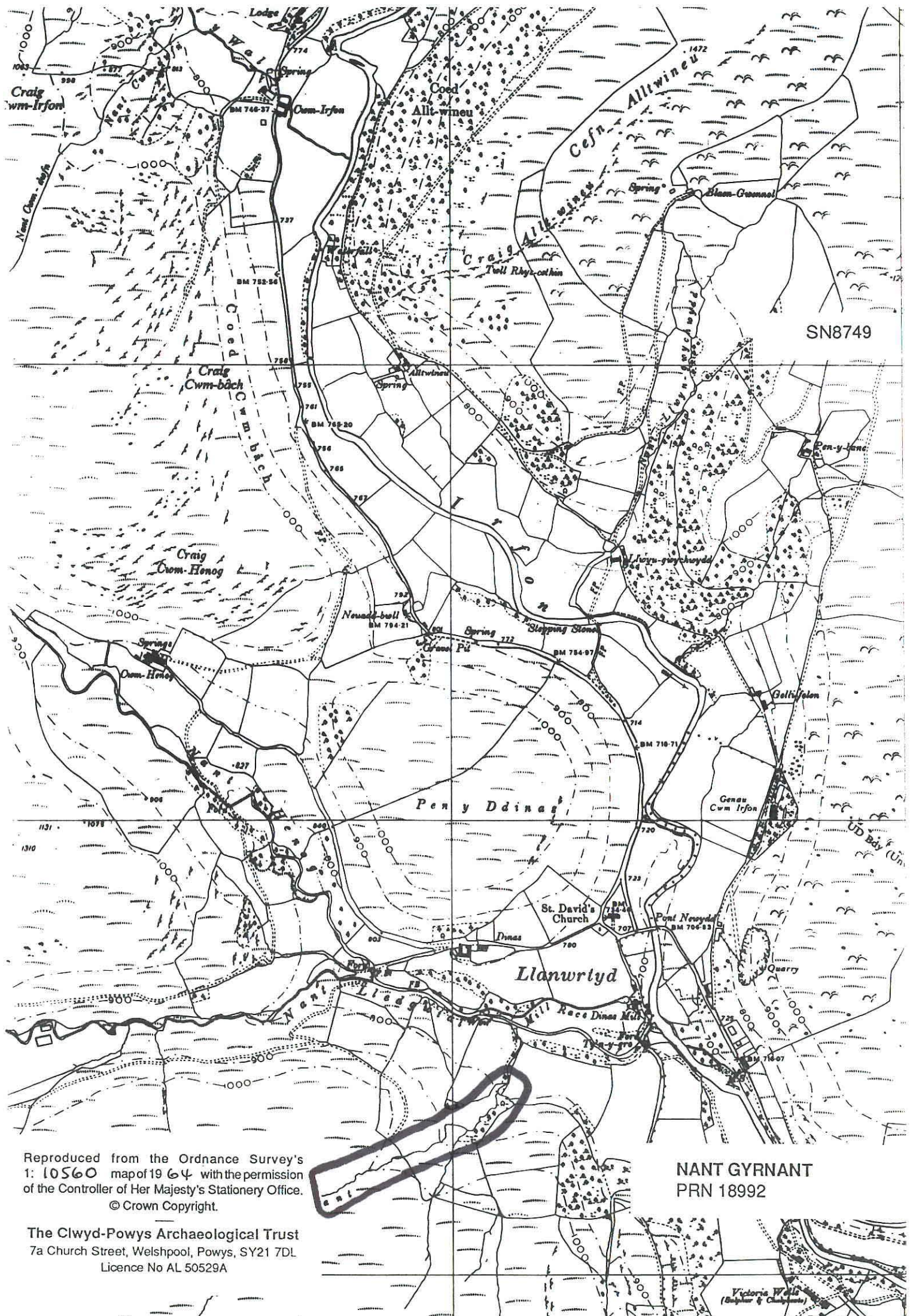
**References**

Hall 1993, 90

Ordnance Survey 2nd Edition 25 inch Map IV SW revised 1903-4

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NANT GYRNANT  
PRN 18992

Victoria Wells  
(Bulphar & Chappin)



<b>18993</b>	<b>NANT Y BLAIDD (Lead)</b>			<b>NGR</b>	SJ09032833	SJ02NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanrhaeadr-ym-Mochnant			260 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1751-1873	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Ordovician volcanics, limestones, shales and slates. The single lode strikes NE-SW and consists of galena and chalcopyrite in an orthoclase gangue.

**Workings**

There are two partially open levels and a blocked deep adit at SJ09062833.

**Transport**

No evidence.

**Power**

A wheelpit was installed to pump the levels in 1872 but no traces of this could be found.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Foster-Smith 1978, 5

Lewis 1964

Regional SMR: Clwyd-Powys Archaeological Trust 1993

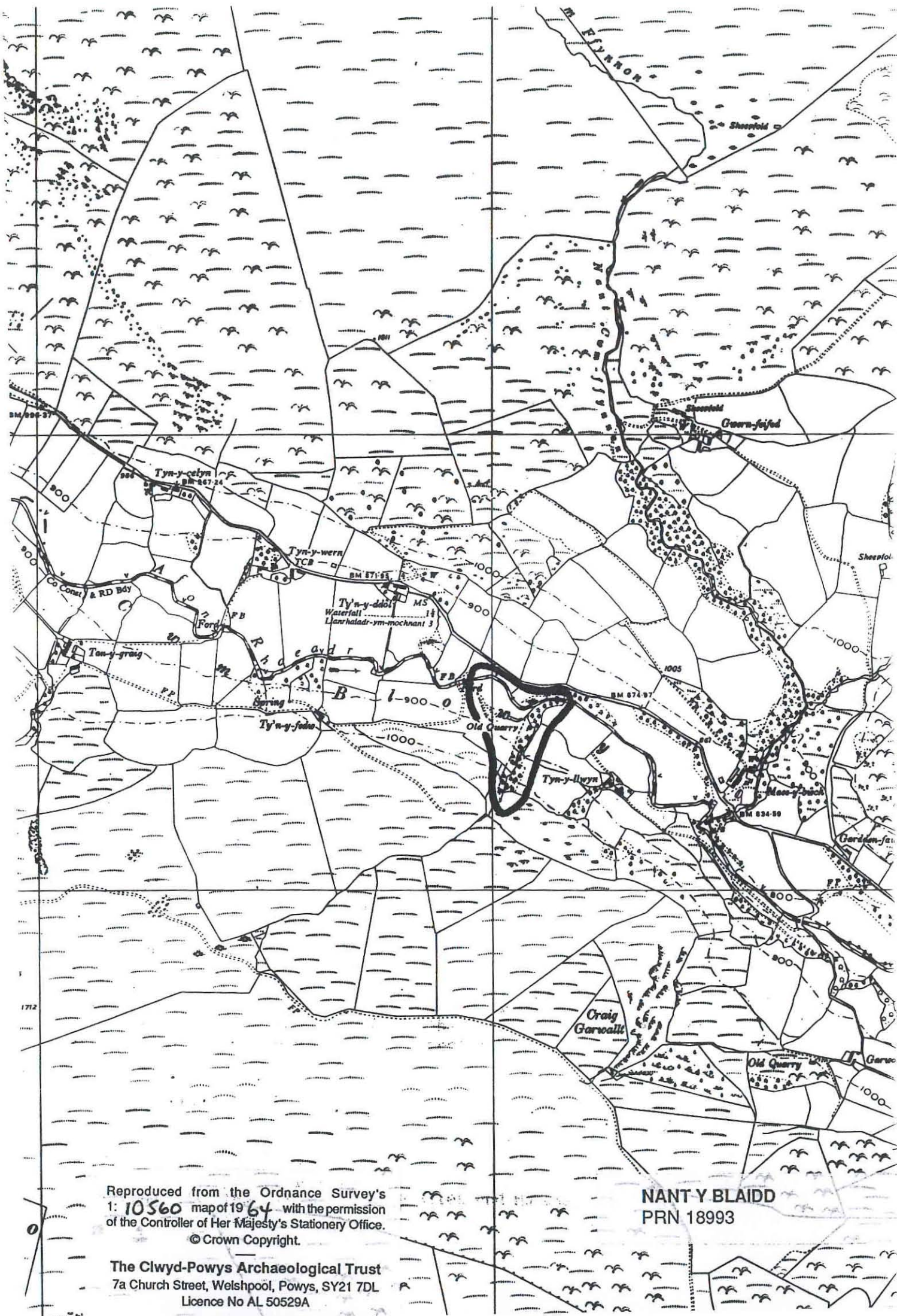
Williams 1985, 13, 15, 30



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NANT Y BLAIDD  
PRN 18993





<b>5513</b>	<b>NANT Y CAR (NORTH) (Copper/Lead)</b>			<b>NGR</b>	SN89086192	SN86SE
<b>District</b>	Brecknock	<b>Community</b>	Llanwrthwl			300 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1844-1883	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

The north-south striking lode in Silurian rocks of the Tarannon and Llandoveryian series has lead and copper mineralisation.

**Workings**

There are at least five shafts traversing the hillside of Craig Y Llysiau together with surface trials and opencuts.

There is a deep adit at the northern end of the mine set close to the stream below the wheelpit.

**Transport**

There are short stretches of earthwork tramway beds which run out of the workings on the hillside onto the spoil tips below.

**Power**

There is a wheelpit close to the Claerwen riverbank which probably pumped the main engine shaft to the south by a line of pumping rods.

**Processing**

There are ore bins, a picking floor and a crusher housing adjacent to the pumping wheel on the dressing floors. A jigger platform is located to the north of the crusher house. Evidence of buddles was not seen although they are expected on this site.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

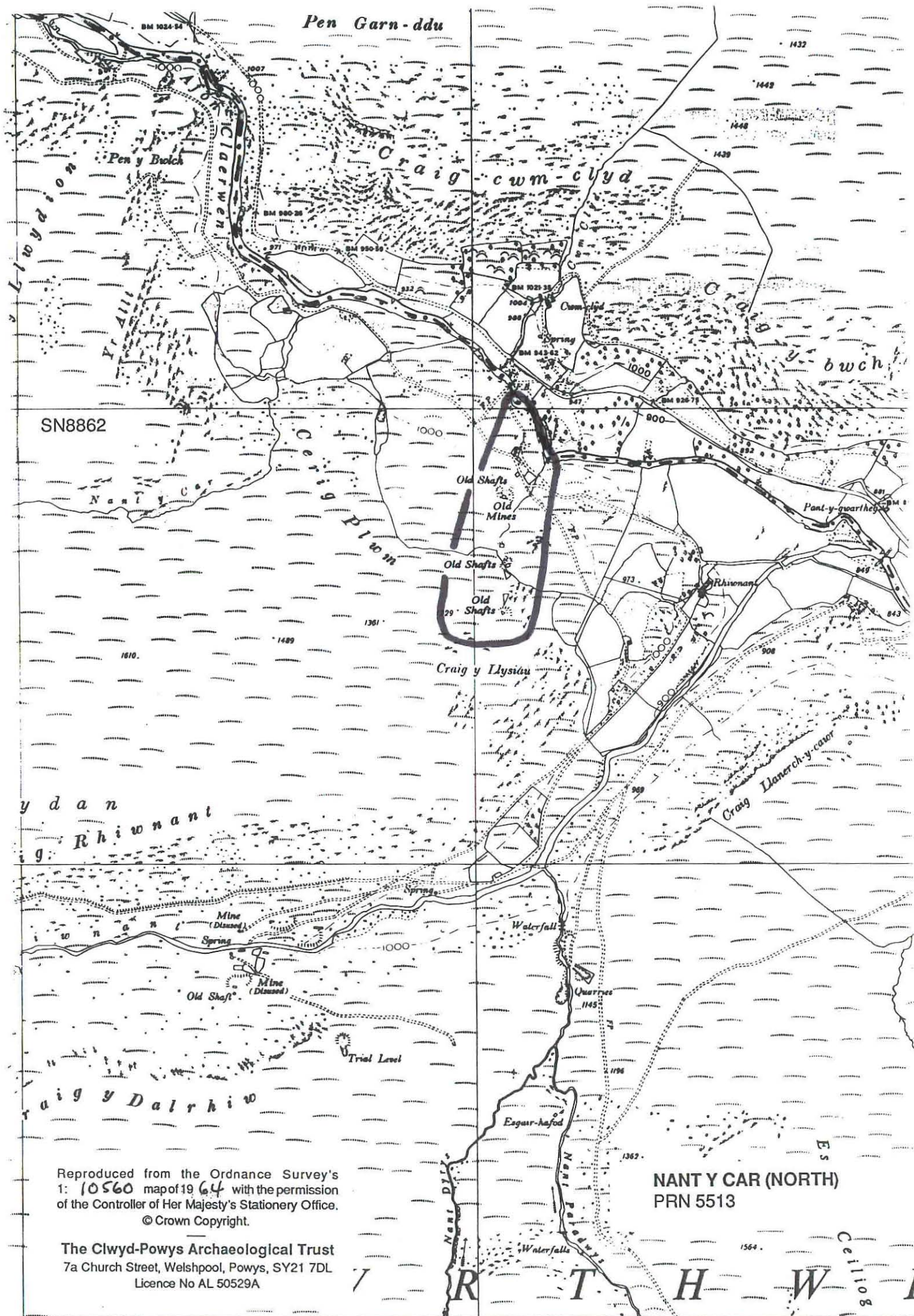
**References**

Hall 1993, 84-85

Ordnance Survey 2nd Edition 25 inch Map IV SW revised 1903-4

Regional SMR: Clwyd-Powys Archaeological Trust 1993





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<b>18994</b>	<b>NANT Y CAR (SOUTH) (Copper/Lead/Zinc)</b>	<b>NGR</b>	<b>SN88676090</b>	<b>SN86SE</b>
<b>District</b>	Brecknock	<b>Community</b>	Llanwrthwl	<b>315 mOD</b>
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b> 18th century/1844-1883
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b> Pasture

### Geology

There are three parallel north-south striking lodes in the valley bottom. The lode explored at Nant Y Car included copper and lead mineralisation.

### Workings

There is a main engine shaft and southern adit close to the dressing floors with a possible earlier blocked adit to the west by the side of the Rhiwnant stream. There are traces of trial workings to the west on the outcropping rock.

### Transport

The mine is reached via a trackway which now passes through the Rhiwnant Farm from the Claerwen Valley. This was presumably the main access for miners travelling to Nant Y Garw also.

There are numerous covered stone leats on the dressing floors one of which carries water from the crusher wheelpit to the buddle while another takes water from this wheelpit to the stream. Another leat can be seen running from underneath a large spoil tip south of the crusher.

There is a ramp to the rear of the crusher for tipping ore onto the rolls and there are remains of tramway track beds leading from the shaft to the ore bins.

### Power

The wheelpit attached to the crusher also powered the pumping rods which connected to the engine shaft. The balance pit can still be seen.

### Processing

There are two ore bins with a picking/washing floor below. There is a platform next to the ore bins, and at the same level, which was presumably also used for rock storage. Jiggers appear to have been placed in the open area south of the ore bins and picking tables judging by the proximity of jig tailings at this location.

There is a single round buddle east of the crusher house with surrounding walls and terraces to the north.

The crusher house has four remaining beam ends in the wall indicating the use of two crusher rolls. The crusher wheelpit has been buttressed on the south-east corner at some stage. The crusher room stands to 4.30m in height. The first floor beam sockets are at 3.20m and approx. 1m above the crusher rolls. There is an attached structure north of the crusher room which may have been a concentrate storage area.

### Other features

No evidence.

### Recommendations

All of the main features of this mine, particularly on the dressing floors, are well preserved and the whole site should be considered for protection. The site should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

A detailed measured surface survey of the surviving structural and earthwork features of this mine site is recommended.

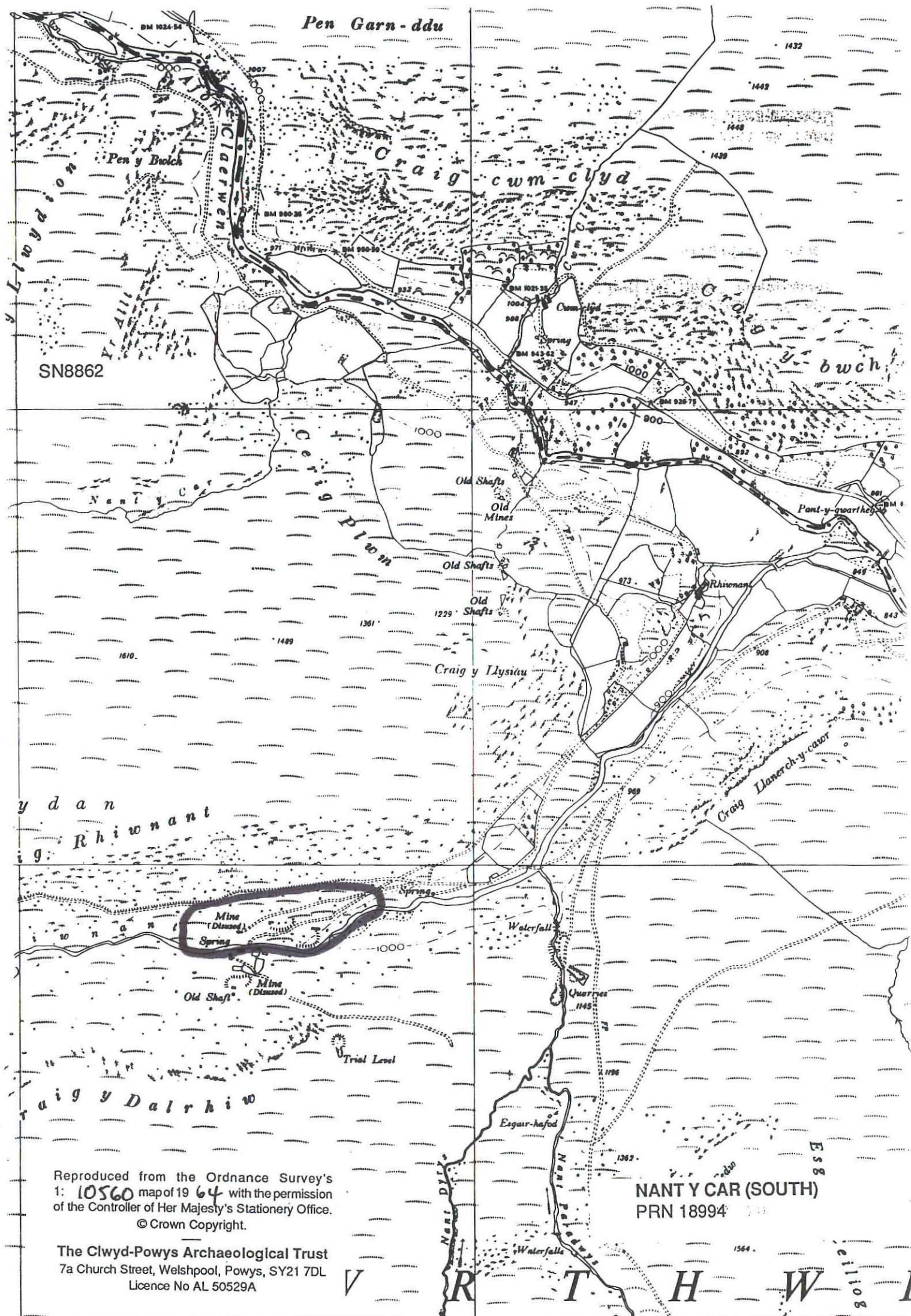
### References

Hall 1993, 84

Ordnance Survey 2nd Edition 25 inch Map IV SW revised 1903-4

Regional SMR: Clwyd-Powys Archaeological Trust 1993





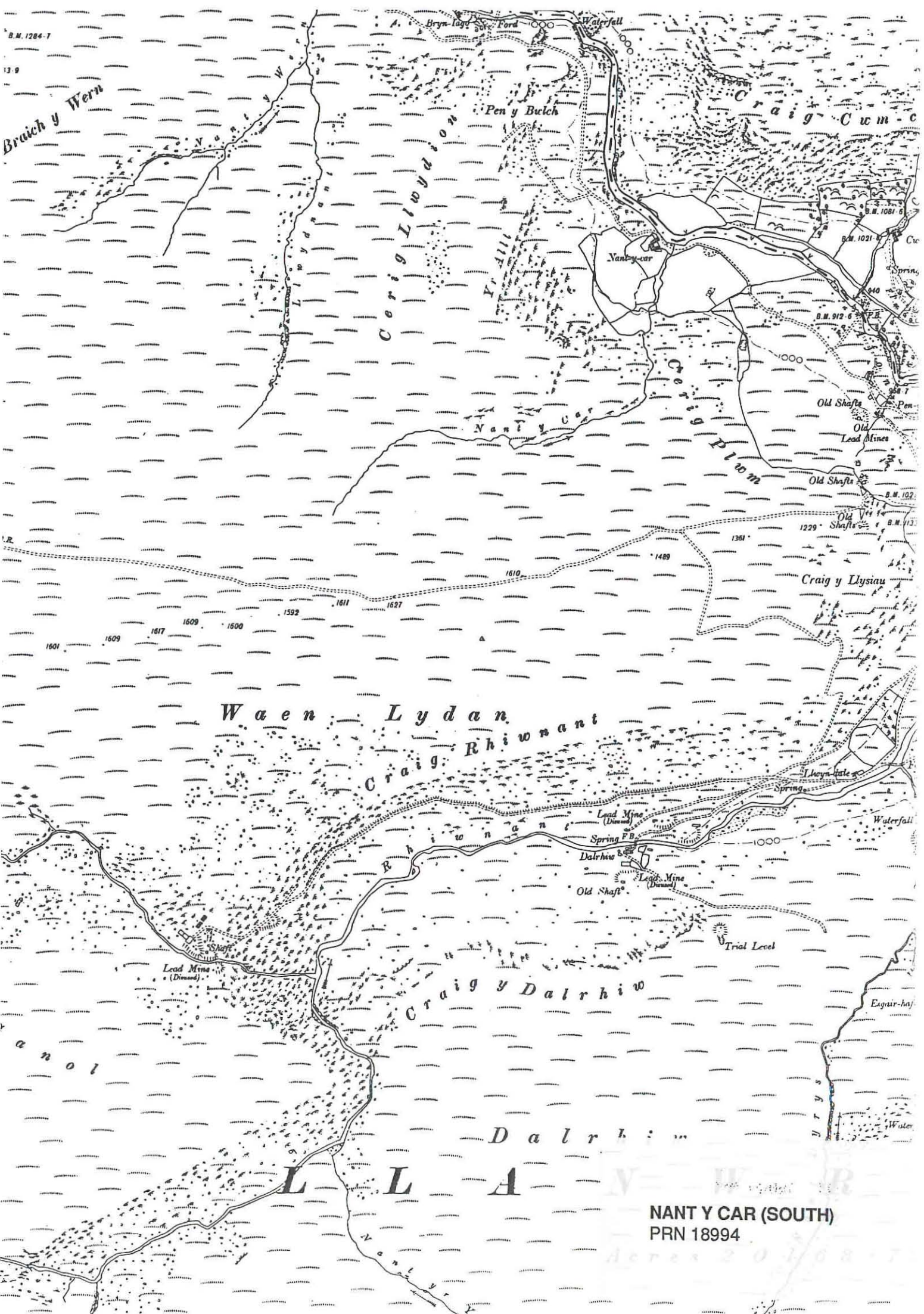
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NANT Y CAR (SOUTH)  
PRN 18994



Braich y Wern



NANT Y CAR (SOUTH)  
PRN 18994

Acres 20 3/88-7



<b>725</b>	<b>NANT-YR-EIRA (Lead/Copper)</b>			<b>NGR</b>	SN82708730	SN88NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			470 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Prehistoric/1883	
<b>Threat</b>	Forestry	<b>Status</b>	Scheduled (part)	<b>Land use</b>	Forestry/Pasture	

**Geology**

Ordovician Lower Van Formation grits. The vein strikes N-S and E-W. Mineralisation includes chalcopyrite and lead with quartz gangue

**Workings**

A shaft is located to the east of the dressing floors at SN82738744.

There is a long prehistoric opencut on the lode to the north of the dressing floors SN82628746 with a 19th c. shaft through its base at the southern end. The Nant Yr Eira stream was formerly diverted around the top of these workings in a leat but now cascades into the workings as a waterfall at the northern end.

Another shaft is located near the source of Nant Yr Eira to the north-west at SN82208660.

There are numerous trials on the hillside to the east of the stream at SN82678747.

**Transport**

Short sections of tramroad extend along the 19th century spoil tips from the 2 shafts close to the dressing floors. One of these can be traced to 2 ore bins while the other ends to the rear of the crusher house.

**Power**

There are 2 wheelpits on the dressing floors. One of these drove the crusher house (38x3ft) and also aided pumping. The other smaller wheelpit is located to the south of the platform on which the crusher wheel sits, its use is not clear. A reservoir exists upstream of the junction of Nant Yr Eira with the Afon Hore at SN82658773.

**Processing**

Surviving remains include a crusher house, 2 round buddles and an ore bin with a picking table platform in front. Jiggers were presumably placed on the platform in front of the large wheelpit. All centred on SN82668731

**Other features**

A mine office is located to the east of the dressing floors and a magazine is sited on the hillside to the south-east at SN82908723.

**Artifacts**

A number of stone axes were recovered from the spoil heaps of the prehistoric mine by O. Davies and later in excavations by S. Timberlake.

'Muller' querns (presumably mortarstones) were found by Davies in his excavations.

**Recommendations**

As the Bronze Age workings and tips are scheduled ancient monuments (Mg ???), work of any kind here will be subject to SMC. Where development is proposed (outside the scheduled area) pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended

**References**

Bick 1990a, 28-30  
Bick 1991a, 57-59  
Davies 1938, 55-60

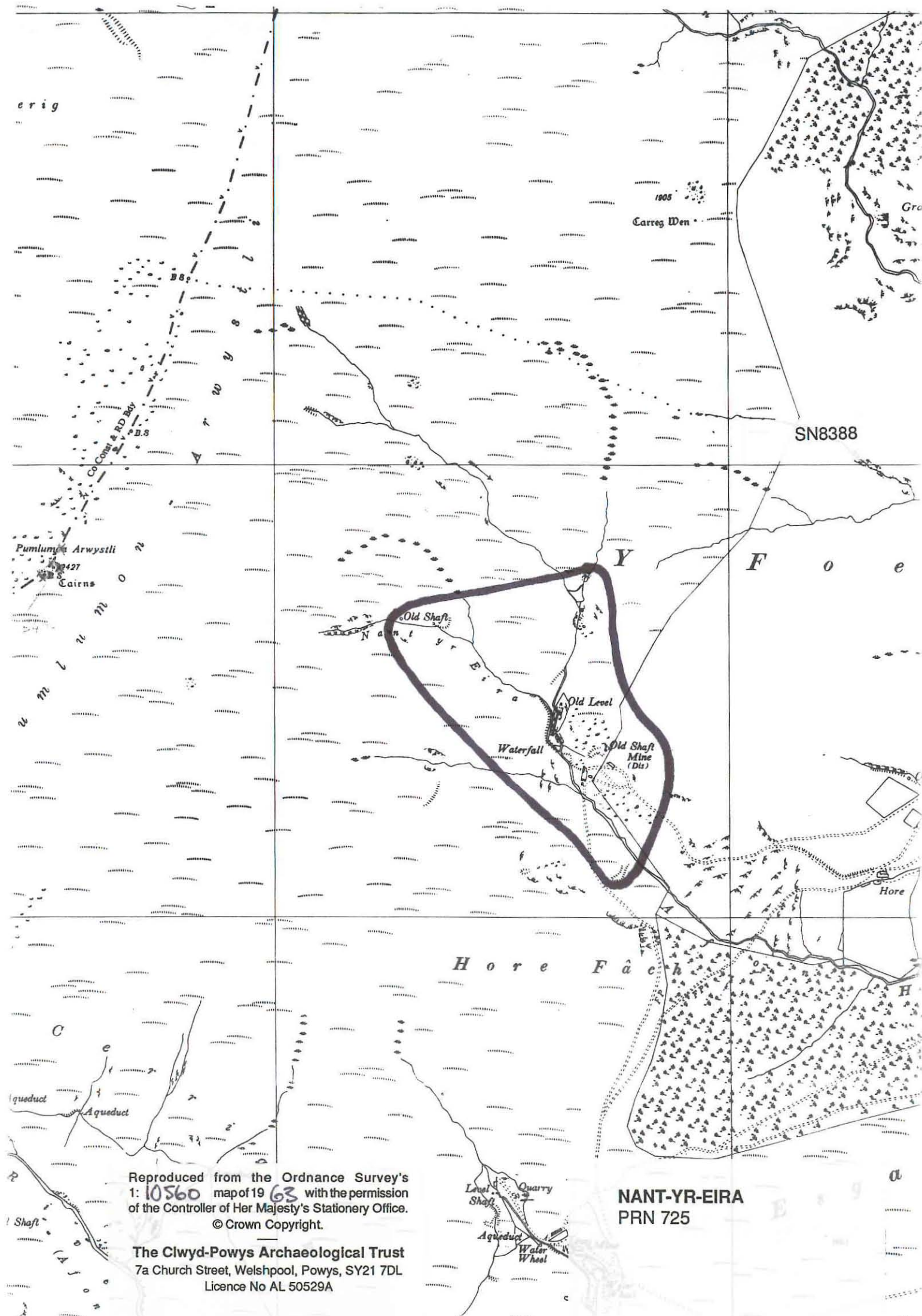


Foster-Smith 1978, 8  
Hamer 1870, 289  
Jones 1922, 4, 163, 176  
Ordnance Survey 1st Edition 6 inch Map XL  
Regional SMR: Clwyd-Powys Archaeological Trust 1993  
Timberlake 1990, 18-21

**Photographs**

CPAT CS92/13/18  
CPAT CS92/15/01-36  
CPAT 142.28  
CPAT 145.00-35  
CPAT 146.12-36  
RCAHMMW 925100/46-47





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NANT-YR-EIRA  
PRN 725



<b>5944</b>	<b>NANTIAGO (Lead)</b>			<b>NGR</b>	SN82608632	SN88NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			450 mOD
<b>Form</b>	Structures	<b>Condition</b>	Damaged	<b>Date</b>	1846-1917	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician Upper Van mudstones and grits. The main vein has a ENE-WSW strike. The N-S cross vein has calcite with galena and sphalerite.

**Workings**

A shaft and deep adit plus two other levels are visible. There are numerous small trials on the surrounding slopes.

**Transport**

Numerous tramways for running the ore from the adits to the dressing floors are visible.

**Power**

Leats running off from Nant Iago supplied water to three waterwheels and 2 Pelton wheels used for pumping, drawing and processing. The pumping wheel reached a maximum size of 60ft diameter. One cast iron Pelton wheel is intact and in situ on the dressing floor. A small gas engine was also formerly present on the dressing floor. The line of the high pressure pipe to the Pelton wheels can be seen as a scar on the hillside above.

**Processing**

In 1900 a new three-storey processing mill was erected which was driven by 2 Pelton wheels and included a stone breaker, rolls, trommels, and six 4 compartement jigs. This replaced a dressing floor about which we have little information. The 1900s mill is partially intact on the ground floor with much processing machinery either in situ or scattered around. Much woodwork survives. A collapsed trommel screen is still in place together with a Pelton wheel and part of a belt driven drive shaft. A small feeder cone is also present. It is possible that other machinery lies buried within the main structure.

**Other features**

Miners' barracks SN82558631, a store shed, mine office, and magazine are present but are poorly preserved.

The cast-iron winding wheels from the shear legs and adjacent cage winder are present in the top of the shaft along with other debris. A cast-iron winding drum with gear wheel and rewind cable is partially buried in a spoil tip adjacent to the shaft SN82478638.

**Recommendations**

The 1900 processing plant is a rare survival of a late machine driven mill and is the most intact of its type in Powys. This site is worthy of protection by scheduling backed up by an appropriate management scheme which allows for suitable consolidation of the standing structure and regular maintenance thereafter.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

The machinery parts on the processing area and around the engine shaft should be recorded in detail and removed to a suitable institution where their future preservation will be guaranteed. The surviving parts are decaying rapidly.

An detailed measured surface survey of the surviving structural and earthwork features of this mine site is recommended.

**References**

Bick 1990a, 57-58  
 Foster-Smith 1978, 20  
 Jones & Moreton 1977, 18  
 Jones 1922, 163  
 Ordnance Survey 1st Edition 6 inch Map XL  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS92/12/01-19  
 CPAT CS92/13/01-36  
 CPAT 142.33-35  
 CPAT 144.00-35

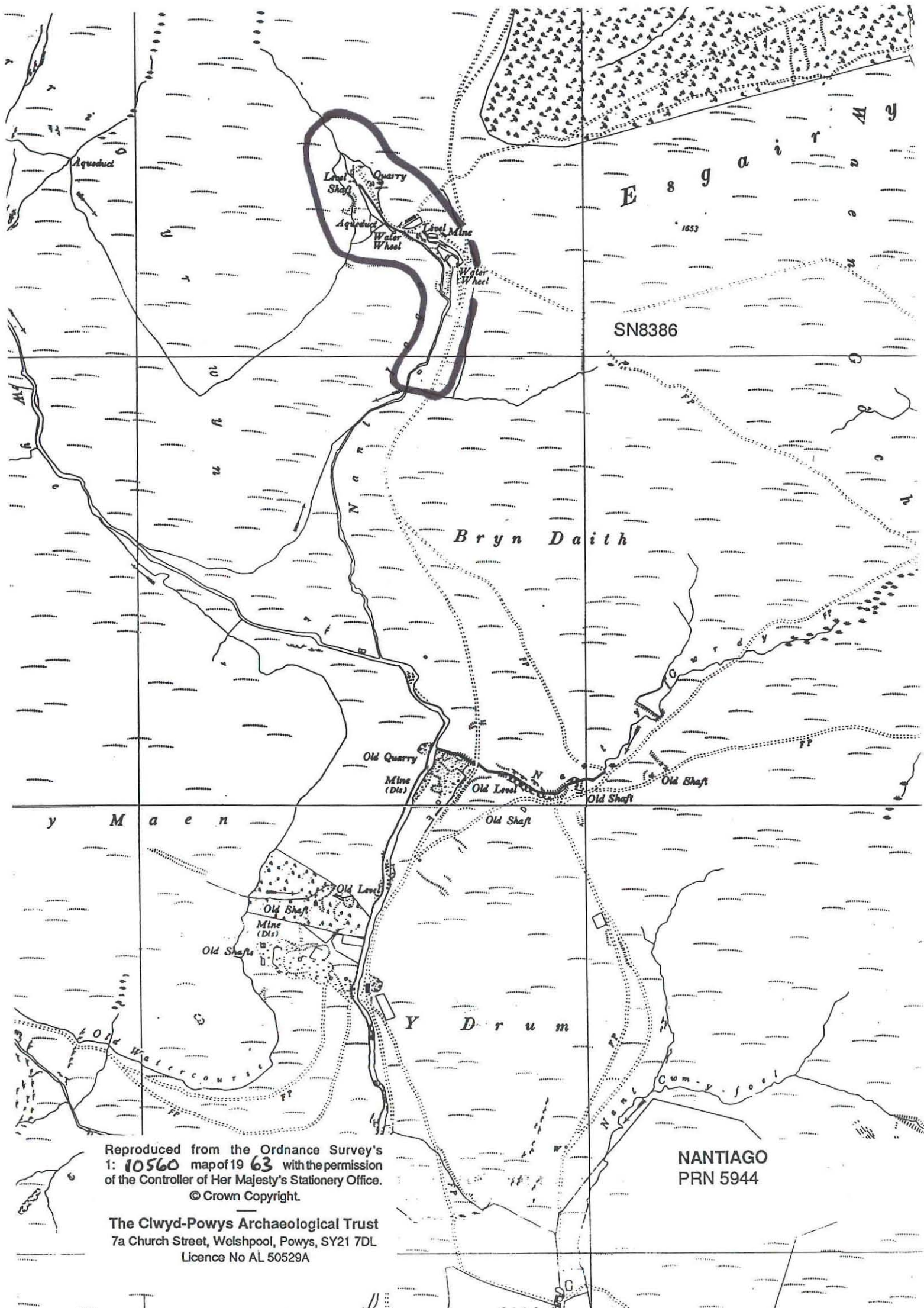
CPAT 146.00-11

RCAHMMW 92/CS/1374-1375,1662-1373

RCAHMMW 925100/48-51

RCAHMMW 925075/42-44





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<b>18995</b>	<b>NANTMELIN (Copper/Lead)</b>			<b>NGR</b>	SN86008772	SN88NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			350 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	18th century/1848-1880	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

A single east-west striking lode with galena and chalcopyrite mineralisation in Silurian Gwestyn formation shales. The dominant gangue mineral is calcite.

**Workings**

There is a deep adit at SN86008770, an upper level at SN86398768 and a shaft at SN86108662.

**Transport**

There are the usual earthwork remains of tramway track beds.

**Power**

No evidence.

**Processing**

There are three wheelpits deeply buried in collapsed material and hidden by forestry. The largest of these was the pumping wheel which drained the shaft and measured 46x4.5ft. The other two drove a small crusher/stonebreaker and the last drove the round buddle. There is plenty of evidence for jiggers in the form of tailings heaps.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further damage to the surviving remains of the mine.

**References**

Bick 1990a, 30  
 Bick 1991a, 11-17  
 Burt et al 1990, 73-74  
 Foster-Smith 1978, 22  
 Jones & Moreton 1977, 18  
 Jones 1922, 174  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993







<b>3673</b>	<b>NANTY/PANTMAWR (Lead)</b>			<b>NGR</b>	SN85258210	SN88SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			300 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Pre 1845-1871	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Silurian mudstones with a single NNE-SSW striking vein and galena mineralisation .

**Workings**

By 1861 there was a deep adit and 2 levels. In 1864 a shaft was cut near the present A44 road. The remains of these workings are badly preserved with the shaft being infilled as well as the levels on higher ground above the road at SN85388232. Another level is now lost in forestry to the west but is known to be located at SN84568205.

**Transport**

No evidence.

**Power**

Buildings included a horizontal 14" steam engine house for pumping and drawing at the 1864 shaft together with an adjacent 25ft boiler housing. The dressing floors were powered by a 20ftx6ft waterwheel & 2 smaller wheels. The foundations of these structures have been almost totally destroyed.

**Processing**

A crusher house base and washing/picking/jigging platforms were present along with traces of round buddles. All of these features have been extensively damaged by removal of the structural fabric for hardcore in farm roads and for infilling mine workings.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

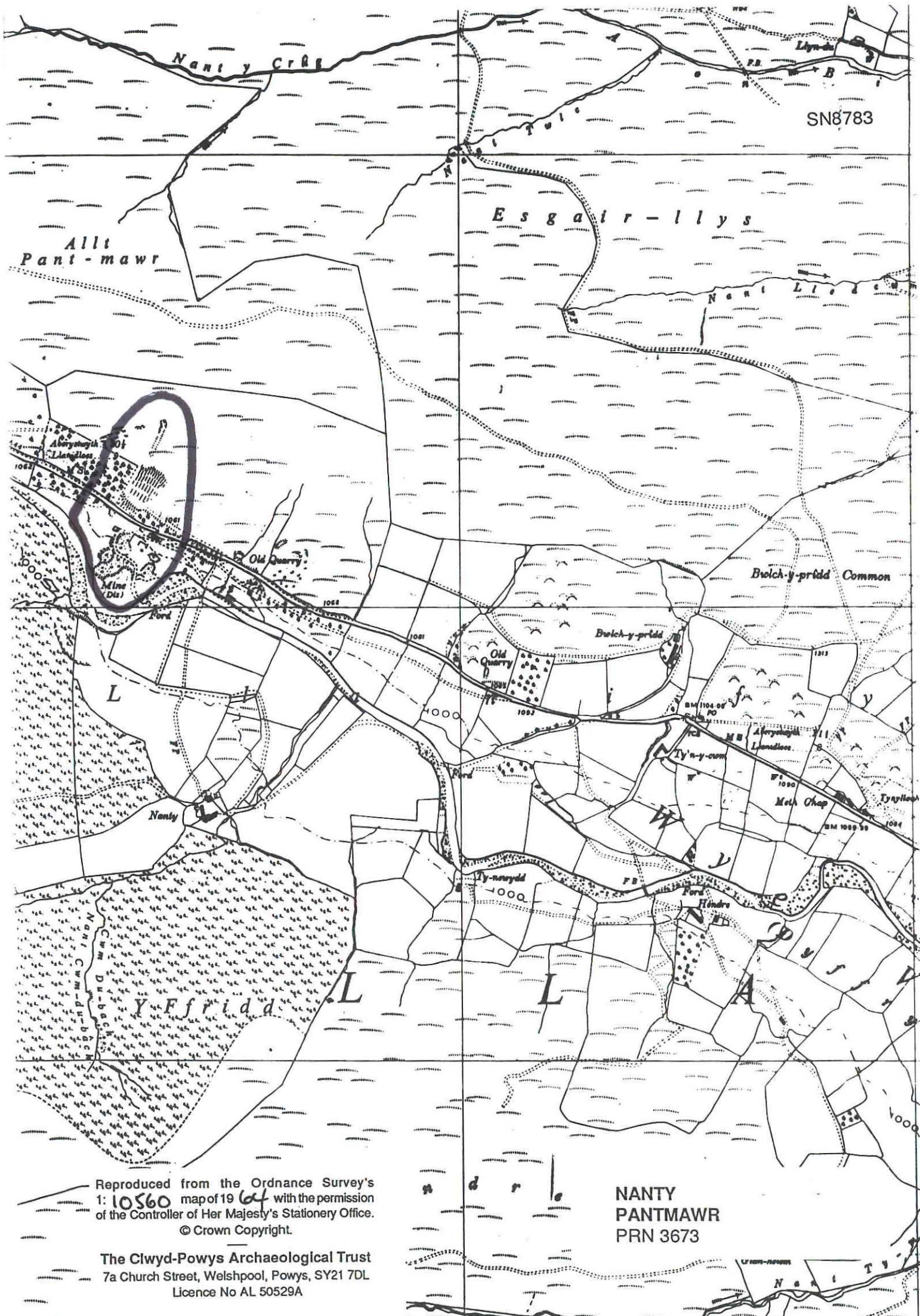
Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Arx 1992, 37-40  
 Bick 1990a, 52-53  
 Bick 1991a, 27-29  
 Foster-Smith 1978, 24  
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NANTY  
 PANTMAWR  
 PRN 3673



<b>5517</b>	<b>NANTYBRAIN/ABERGWESYN (Lead)</b>			<b>NGR</b>	SN83205045	SN85SW
<b>District</b>	Brecknock	<b>Community</b>	Llanwrtyd Wells			320 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1840s-1883	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Two or three lodes were worked on a north-south strike with galena mineralisation.

**Workings**

There is a deep adit at SN84305157. A further adit can be seen at SN83255025. There are two shafts at SN83235018 and SN83215029, the lower of which connects to the second adit mentioned above. Surface trials can be seen in a number of places on the slopes of Esgair Nant Y Bryn and Pen Y Foel.

**Transport**

A leat off the Nant Ddwrn supplied water to the waterwheels for pumping and crushing.

The old metalled track along the north-eastern slopes of Esgair Nant Y Brain is probably the original miners' trackway.

There are a number of earthwork survivals of tramway track beds leading out onto the spoil heaps from the workings.

**Power**

The waterwheel pit at SN83155055 was used for pumping the shafts and in 1871 a 30x2.5ft waterwheel was apparently installed.

A second smaller waterwheel pit can be seen at SN83155049 which still displays an intact axle and parts of the rim.

Immediately prior to closure in 1850 two engines were installed and the dressing floors were expanded with a crusher house, jiggers and buddles, foundations of which can still be seen.

**Processing**

Evidence exists of manual dressing and mechanised forms of processing in the form of a crusher house and platforms for jigger bases as well as round buddles. Ore bins and a picking/washing floor are also present.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

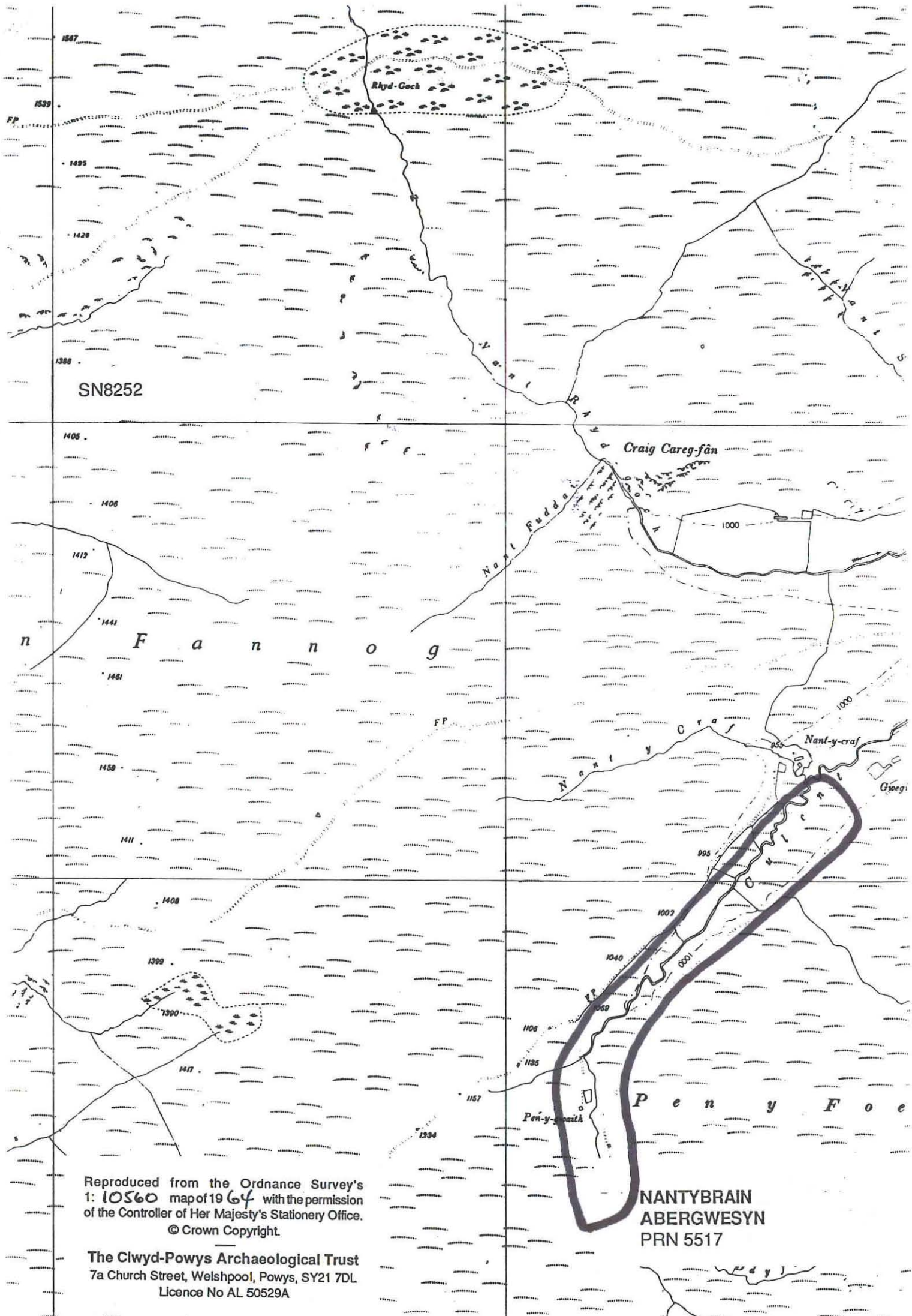
**References**

Hall 1993, 88-90

Ordnance Survey 1st Edition 6 inch Map IX NE surveyed 1885-7

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**5512 NANTYGARW (Lead)****NGR**

SN87436060

SN86SE

<b>District</b>	Brecknock	<b>Community</b>	Llanwrthwl		410 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	1883-1899
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture

**Geology**

Silurian rocks of the Tarranon and Llandovery series. Chalybite gangue with galena. The lode strikes north/south.

**Workings**

There is a single shaft with an adit lower down the Nant Y Carw to the east close to the pumping wheelpit. The shaft has a well preserved wooden frame at its rim.

**Transport**

The ore was transported to the dressing floor above by an incline .

The concentrate was transported from the mine along a precipitous miners track which was blasted out of the hillside of Craig Rhiwnant. This is a spectacular piece of engineering but is unfortunately being badly eroded by land slips where stream culverts under the track have become blocked.

A leat contours the hillside from Llyn Carw and supplies water to the dressing floors for over a mile from its source. The leat was constructed in 1893.

**Power**

There is a wheelpit below the shaft which was presumably pumping the shaft by a line of pumping rods.

There is some mention of a water turbine and standby steam or gas engine on the site at a later date.

On the dressing floors machinery bases are present but there are no details of the power source.

**Processing**

A stone breaker, crusher and jigger platforms are present. The main processing mill foundations are extensive and it would be interesting to know what machines were being used. There are a number of fragments of wooden troughs present on the north side of the dressing mill.

A single round buddle was seen just to the west of the shaft below the tailings tip.

The upper part of the mill structure contains evidence of small ore chutes to lower dressing areas in the mill.

There are slimes pits adjacent to the shaft

**Other features**

The foundations of barracks and a mine office together with a smithy are present on the main mine site while to the east at SN87716067 is a small magazine which is intact except for a falling roof.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and the blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail

A detailed measured surface survey of the surviving structural and earthwork features of the mine is recommended

**References**

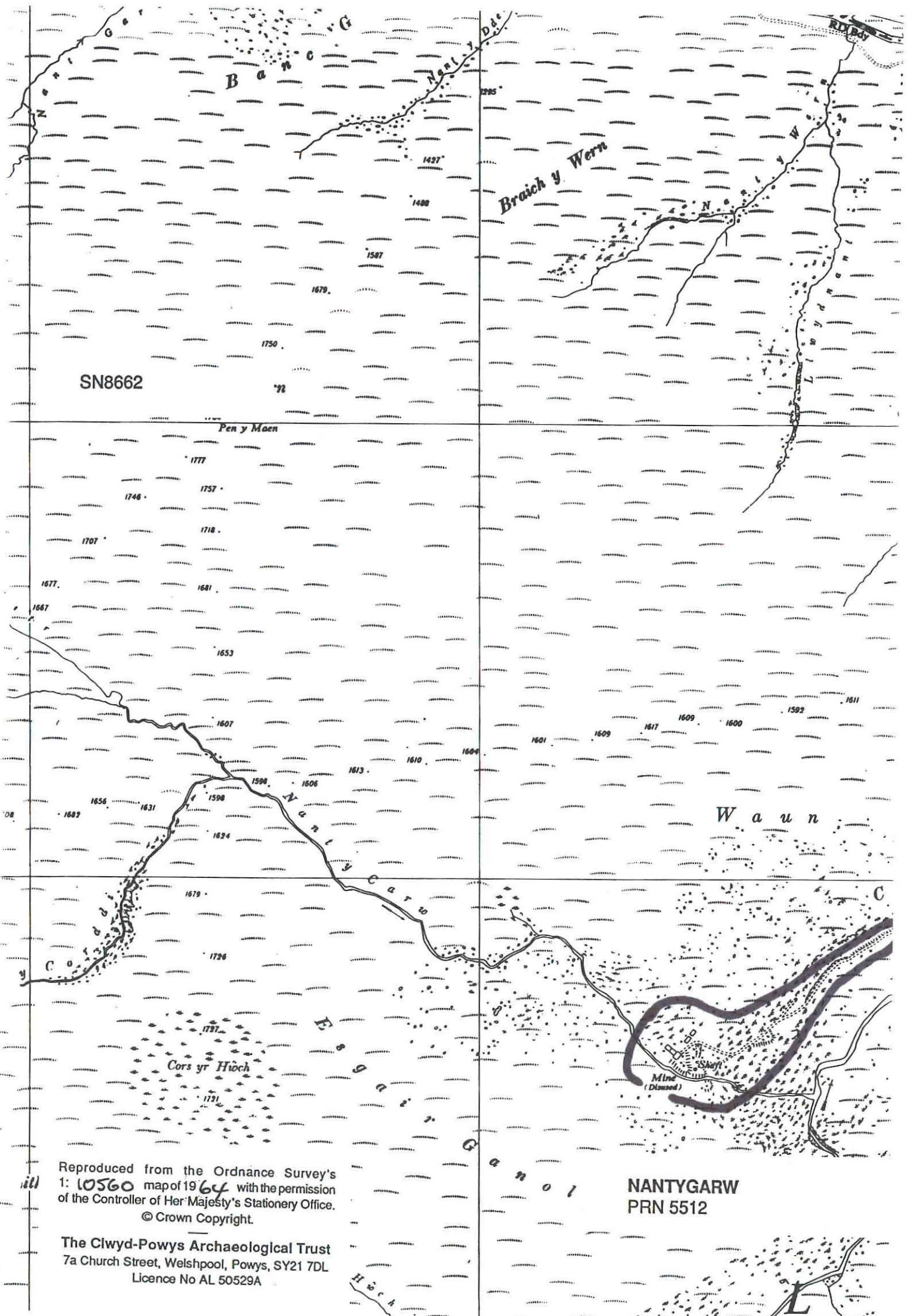
Bick 1991a, 22

Hall 1993, 86-87

Ordnance Survey 2nd Edition 25 inch Map IV SW revised 1903-4

Regional SMR: Clwyd-Powys Archaeological Trust 1993





SN8662

Pen y Maen

Braich y Wern

Wau

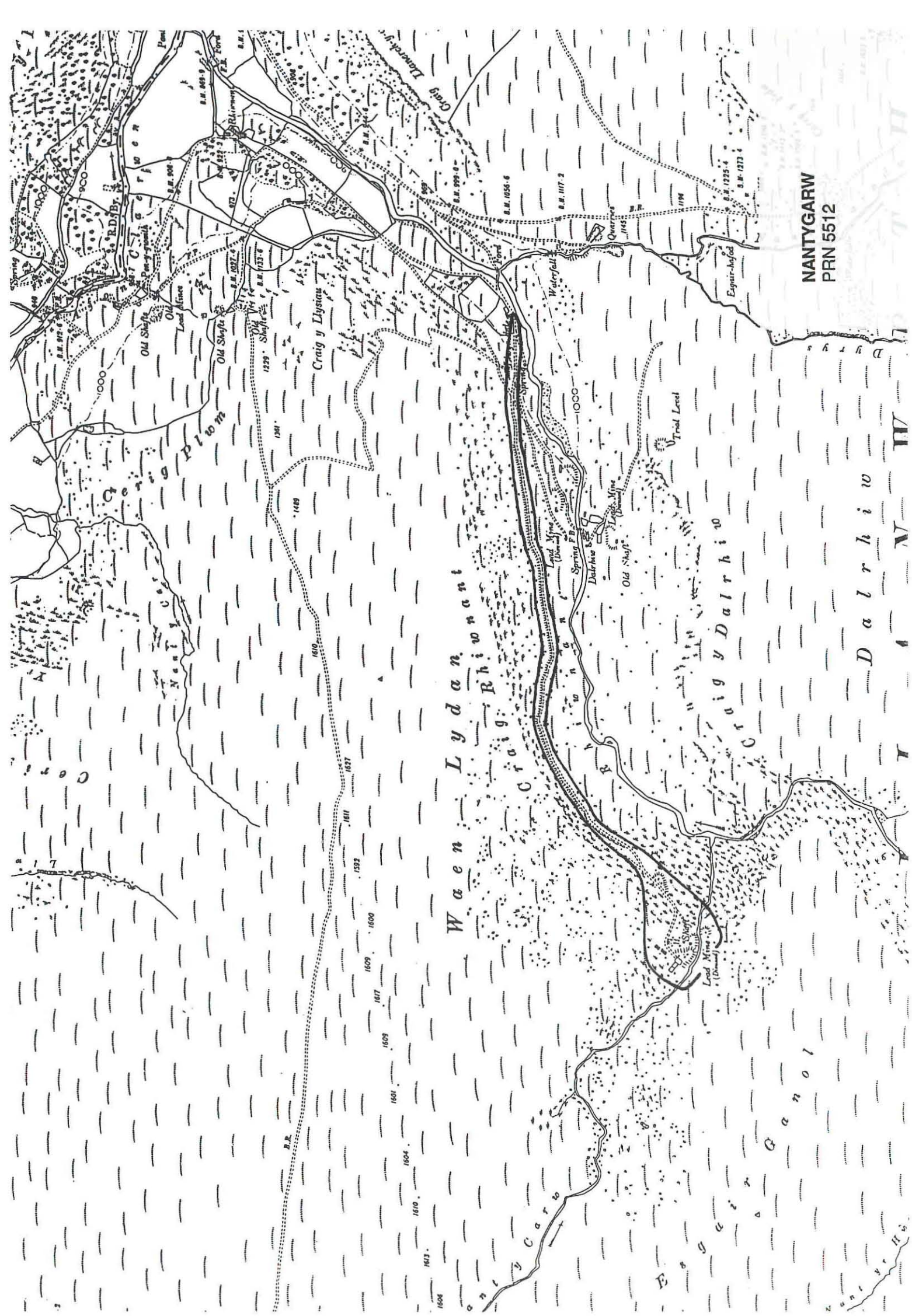
Cors yr Hloch

NANTYGARW  
PRN 5512

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**8476 NANTYRICKET (Copper)**

NGR

SN86558678

SN88NE

<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig		270 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	Prehistoric ?/19th century
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry

**Geology**

Ordovician grits and conglomerates of the Lower Van Formation with chalcopryite and calcite veins striking ENE.

**Workings**

An adit at the rivers edge on the north side of the Severn, probably 19th century in date. SN86708676.

A deep narrow opencut on the south side associated with a small processing area and spoil tip close to the rivers edge. SN86658676.

A wide opencut north of the present forestry track at SN87158678.

O.T. Jones recorded a deep narrow opencut 200yds east of the main adit known as the 'Thieves Den' where a number of hammerstones are recorded on the spoil tips along with charcoal and burnt stone, presumably from firesetting. This site has not been located.

**Transport**

An inclined trackway connects the adit to the present forest road above.

**Power**

No evidence.

**Processing**

There is some evidence of hand sorting and limited dressing close to the narrow opencut on the south side of the stream.

**Other features**

A rectangular building of unknown use is located downstream of the narrow opencut on the south side of the Severn SN86698678. Two internal divisions are visible and it appears to be drystone walled. This structure may be related to farming activity or it may be a small mine office related to 19th century workings mentioned above.

**Artifacts**

Stone hammers are reported to have been seen on the spoil tips of a deep narrow opencut on the north side of the Severn 200yds east of the adit entrance. This site is as yet unlocated.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

Should the location of the prehistoric mine be discovered the remains should be protected by scheduling, or other appropriate means, after confirmation of the dating by trial excavation and detailed surface survey.

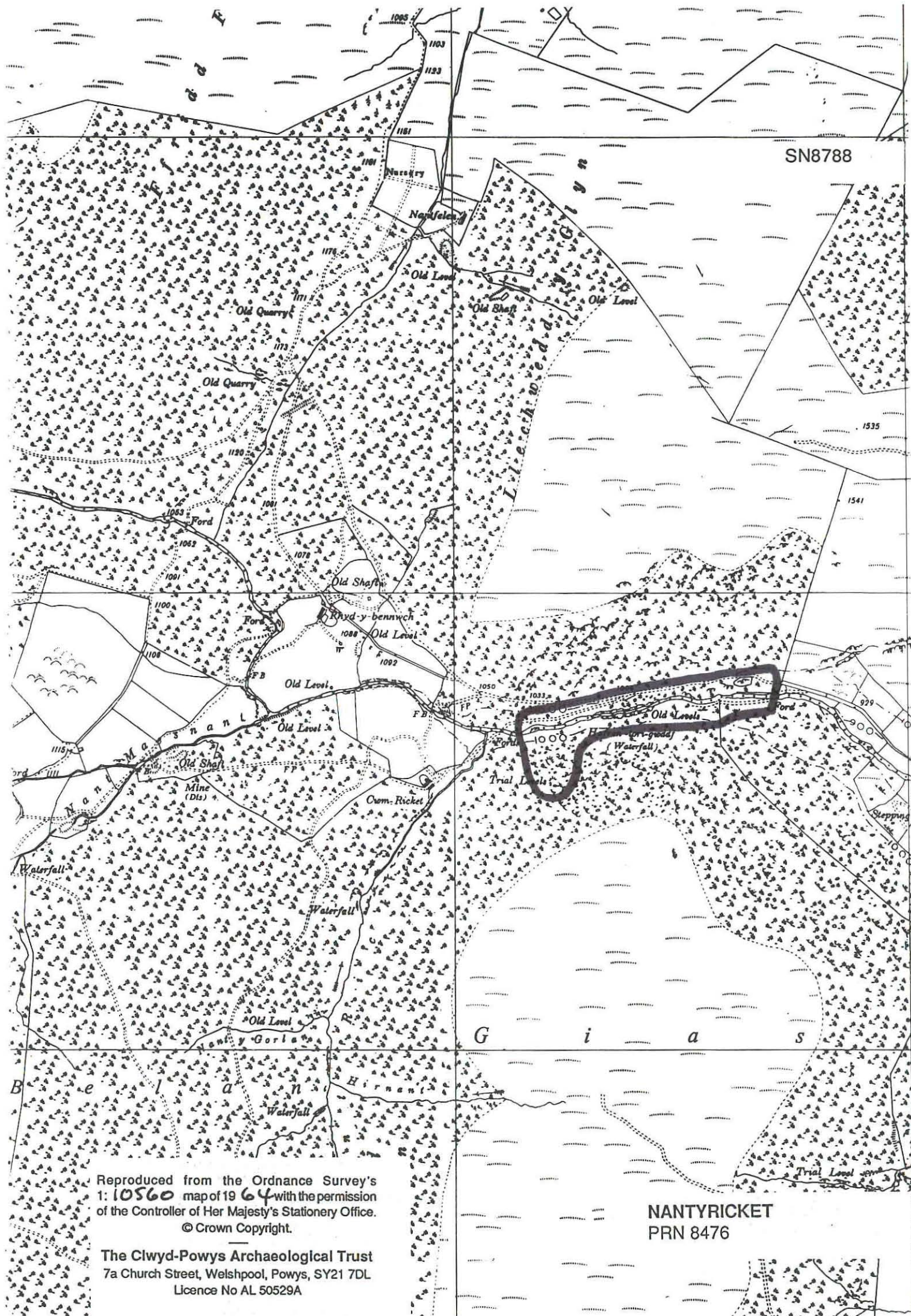
**References**

Bick 1990a, 31  
 Foster-Smith 1978, 23  
 Hamer 1870, 289  
 Jones & Moreton 1977,  
 Jones 1922, 4, 47, 174, 176  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS92/10/08-11  
 CPAT 142.13,27





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NANTYRICKET  
PRN 8476



911

**NANTYRICKET**  
**PRN 8476**

<b>18996</b>	<b>NEWCHAPEL/CWM-MAWR (Lead trials)</b>			<b>NGR</b>	SN98958335	SN98SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llandinam			220 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	Pre 1872	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry	

**Geology**

Silurian Frongoch formation mudstones and grits with galena and barytes mineralisation. A number of lodes were intersected by the workings striking east-west.

**Workings**

There are two shafts and two levels centred on SO98958335. One of the shafts was an engine shaft.

**Transport**

Earthwork traces of tramway track beds can be seen on the spoilheaps.

**Power**

No evidence survives although a waterwheel and drawing machine are recorded as being present in 1872.

**Processing**

Manual dressing is evidenced by sorted rock on the spoil heaps and jigger tailings.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

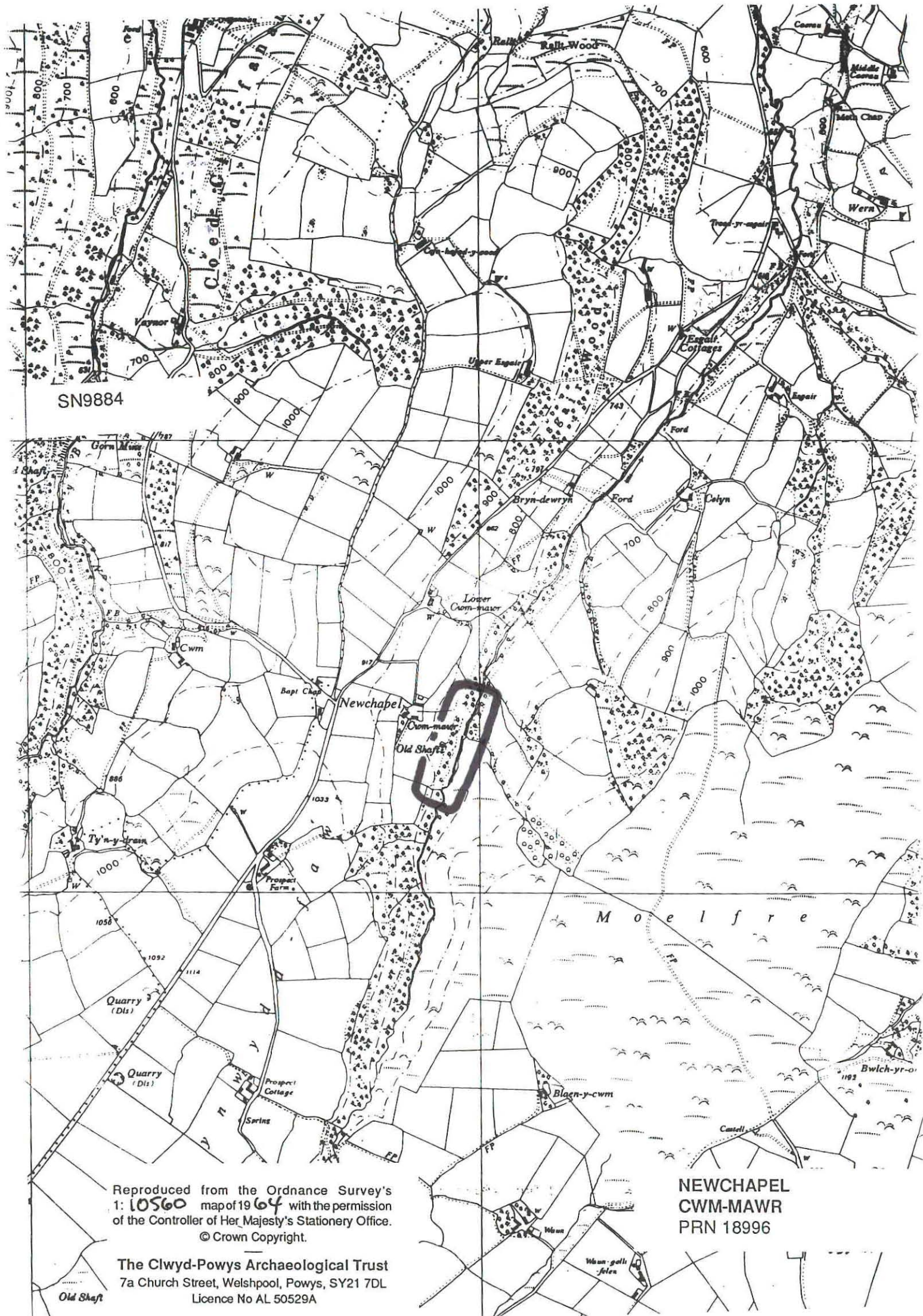
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 51  
 Foster-Smith 1978, 31  
 Jones & Moreton 1977, 19  
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NEWCHAPEL  
CWM-MAWR  
PRN 18996



<b>1042</b>	<b>NEWTOWN (Lead/Copper)</b>			<b>NGR</b>	SO09609100	SO09SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Newtown and Llanllwchaearn			120 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Destroyed	<b>Date</b>	Roman ?/1746-1776/1856	
<b>Threat</b>	Housing development	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

The north/south vein consists of a quartz and barytes gangue with galena, chalcopryite and malachite in a Silurian shale. Boulder clays lie over the shales and form the roof of the level. A thin stringer vein parallel to the main vein was exhausted at depth.

**Workings**

An 80ft shaft connects with 2 short levels driven south from the riverbank. The upper of these has been cut for a length of 50ft and has two short side galleries.

**Transport**

Upstream of the mine a path was formerly visible rising from the base of the cliff to the top level. This access and ore removal path may date to the original workings but is more likely to be nineteenth century.

**Power**

No evidence.

**Processing**

It would appear that smelting of the ore retrieved was carried out on site. A layer of slag, furnace lining, charcoal and stones was recorded in the riverside cliff at a depth of approximately 1.20m from the present ground surface. The latter material was possibly washed downslope from a smelting site further uphill of which no remains now exist.

**Other features**

The shaft and lower level was encountered in 1972 during the cutting of a new sewer tunnel from Nantoer to Newtown. The shaft and level were both run-in.

**Recommendations**

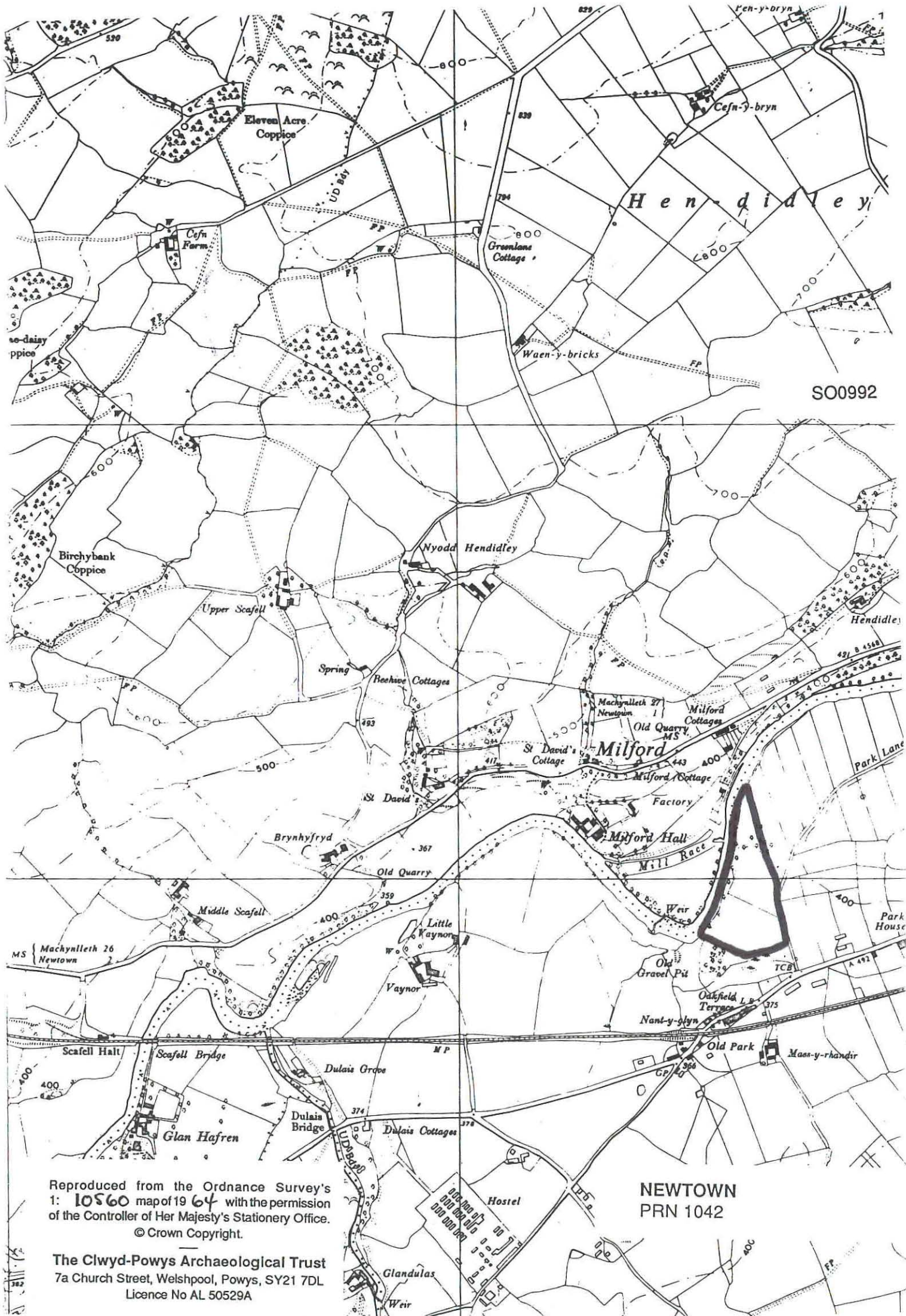
Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

**References**

Bick 1990a, 46-47  
 Davies 1939,  
 Foster-Smith 1978, 10  
 Morris 1979,  
 Ordnance Survey 1st Edition 25 inch Map  
 Ordnance Survey 2nd Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993







<b>5938</b>	<b>PENYCLUN (Lead)</b>			<b>NGR</b>	SN93098730	SN98NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			225 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1845-1872	
<b>Threat</b>	Subsidence/Weathering	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician Van formation. A single vein with an ENE strike contained lead and zinc ores with barytes and witherite gangue.

**Workings**

There is a shaft connecting to the adit north of the engine house at SN93008731. The Deep or Eastern adit was not identified. There was a trial shaft in the wood to the north at SN93128752.

**Transport**

Earthwork remains of short tramway beds out onto the main spoil tip could be seen.

**Power**

A two storey Cornish beam engine house survives which was used for driving the winding wheel and pumping rods, it was installed in 1862 at SN93068731. The building is roofless with an adjoining ruinous boiler seating, chimney & wheelpit. The boiler house measures 38x11x3ft, the chimney 31ft high x 6ft wide, the engine house 15x18x25ft. The chimney is leaning badly due to subsidence. Water from the adit now flows through the engine house on occasion.

**Processing**

The dressing floors were destroyed by land reclamation to the east and consisted of at least 1 wheelpit with jiggers and buddles. Spoil tips are still visible at SN93458770. There is some evidence of dressing close to the engine house with low foundations surviving as earthworks.

There was apparently a lead smelting works at Penyclun which was presumably sited close to the dressing floors though no evidence survives.

**Other features**

There is a possible square magazine house at the eastern end of Penyclun Farm SN93028740. There is a square building 170m to the east of the engine house at SN93258736; its function is not known and it may be unrelated to the other mine buildings.

The earthworks to the east of the engine house may represent a mine office as well as minor dressing structures.

**Recommendations**

The engine house, its boiler and the chimney remains should be preserved. These features should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for the consolidation and subsequent regular maintenance of the standing structures.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

The chimney is leaning badly and the stack fabric is suffering from weathering. Consolidation and underpinning of the stone and brick fabric is urgently required if this structure is to be saved from collapse.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to any decision on proposals involving shaft capping and blocking of levels.

An aerial photographic survey of this mine site is recommended for enhancement of surface detail.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended.

**References**

Bick 1990a, 40-41  
 Foster-Smith 1978, 27  
 Hamer 1872, 28-29  
 Jones & Moreton 1977, 20



Jones 1922, 45, 157, 161-2

National Monuments Record: Notes by N Chapman (July) 1993

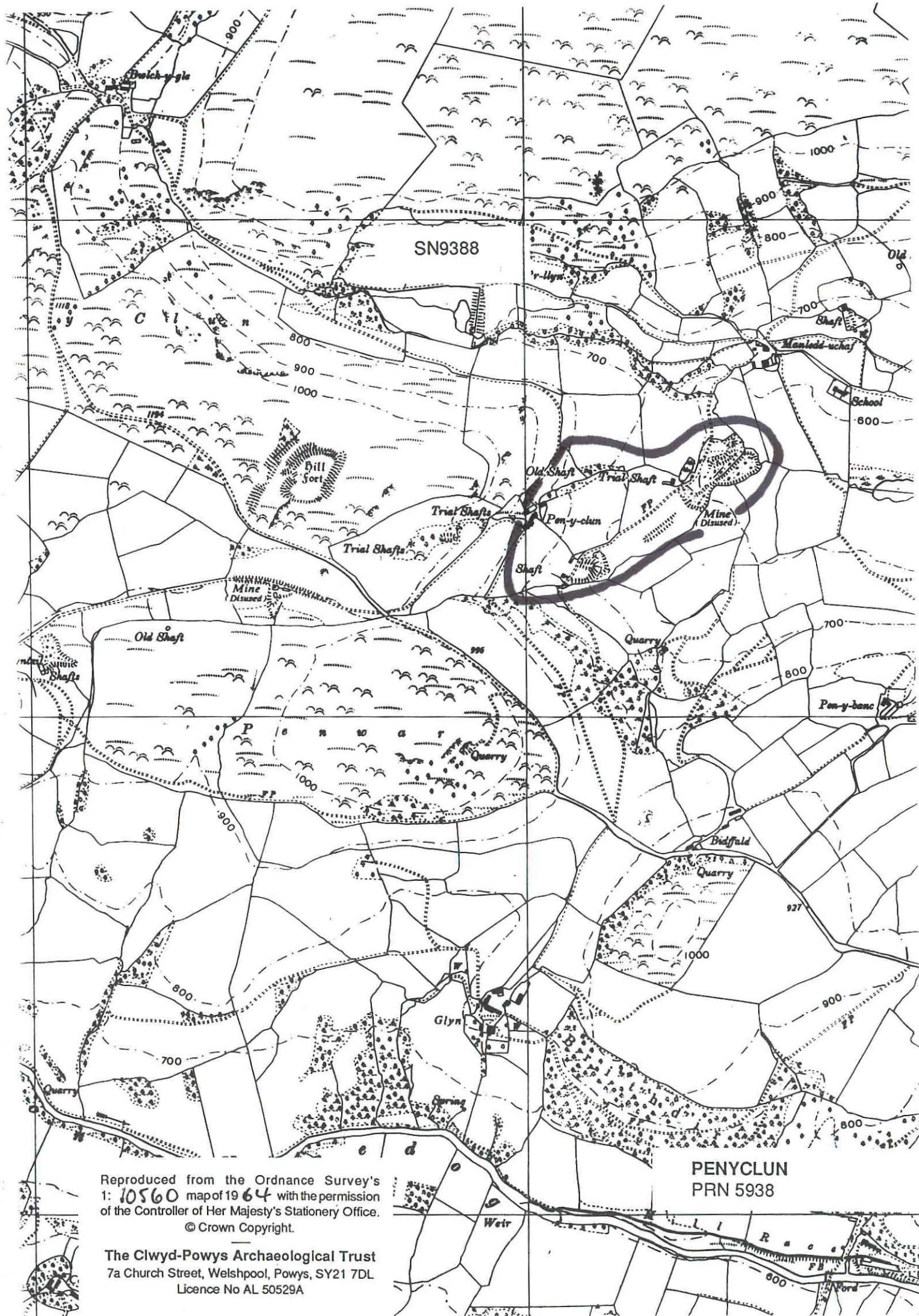
Ordnance Survey 1st Edition 25 inch Map XLI(2)

Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS92/19/02-16

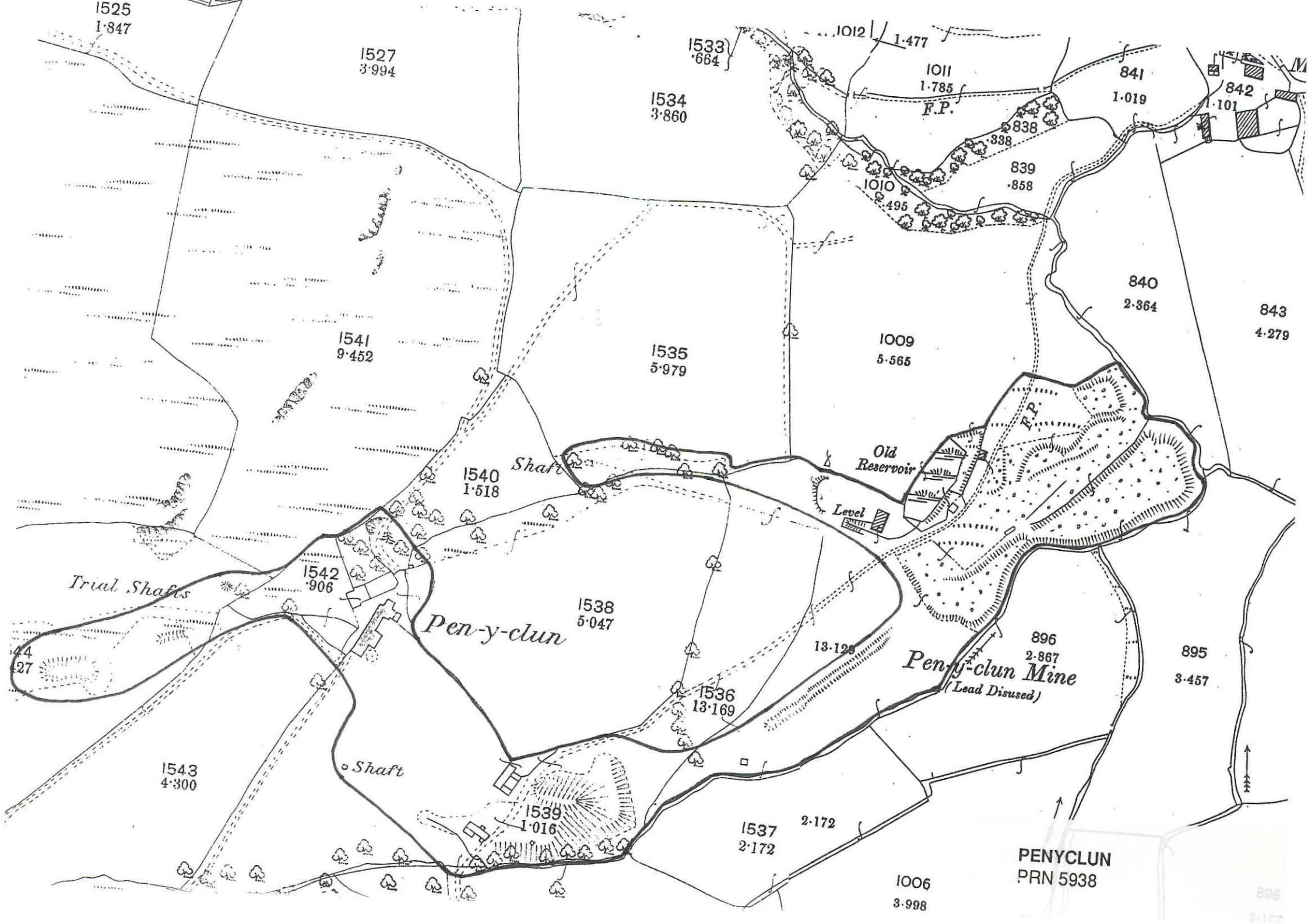
CPAT 150.08-37



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**20978 PONT-NEDD-FECHAN (Lead/Silver Trials)****NGR**

SN903097

SN90NW

<b>District</b>	Brecknock	<b>Community</b>	Ystradfellte			130	mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Nr.Intact	<b>Date</b>	19th century ?		
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Woodland/Rough Pasture		

**Geology**

Upper Carboniferous (millstone grit series?) fine grained sandstones with hard grit above. No evidence of mineralisation.

**Workings**

Trial levels on the west side of the Afon Mellte driven presumably in search of lead or silver (SN903097). The downstream levels are blocked by collapse but the upstream examples are still open and measure 4.5m across at the entrance and were cut only 3.5m into the hillside. A central pillar supports the roof of the trial.

**Transport**

No evidence

**Power**

No evidence

**Processing**

No evidence

**Other features**

No evidence

**Recommendations**

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

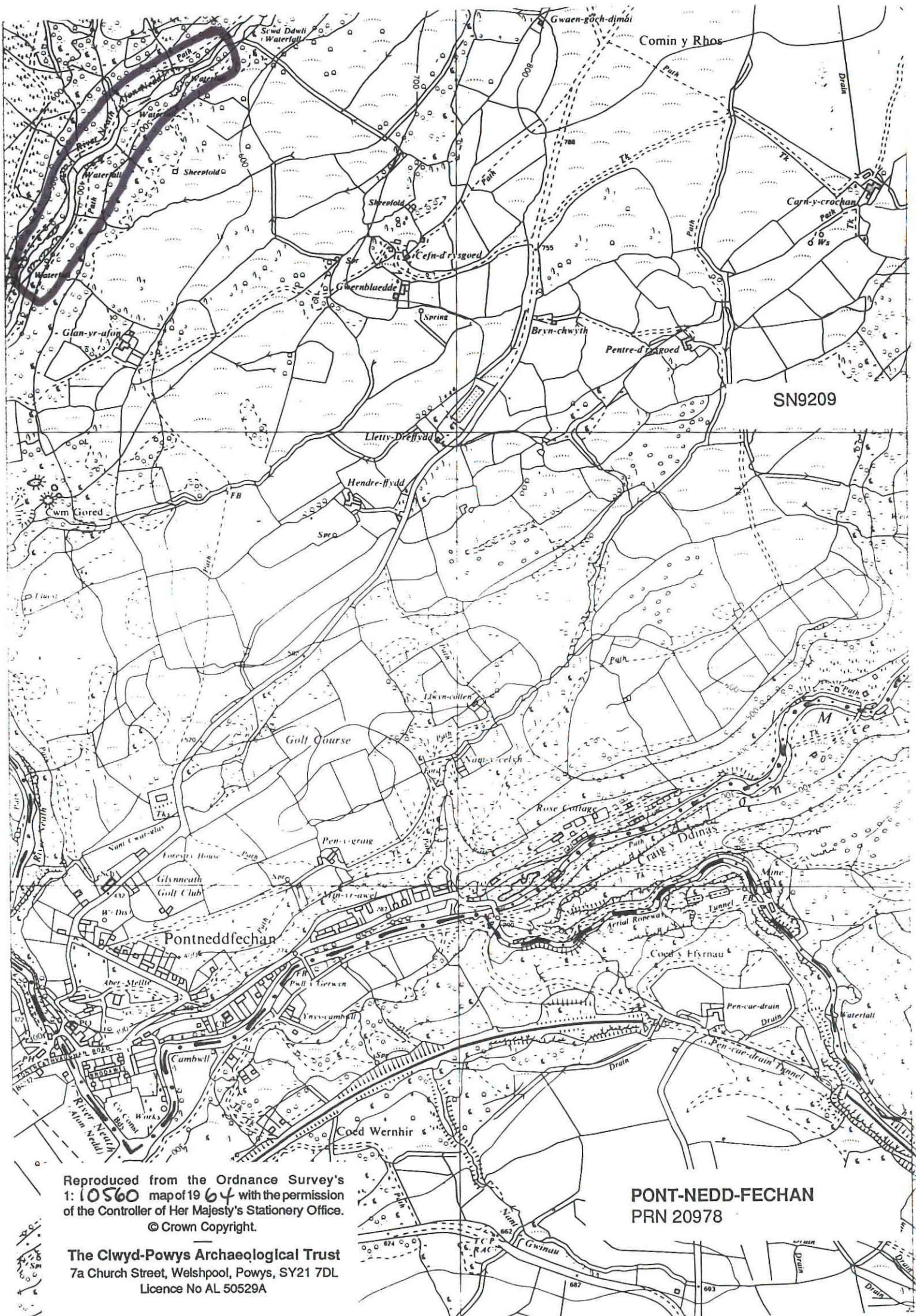
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and gating of levels.

Future forestry planting, thinning and felling proposals should avoid further damage to the surviving remains of the mine.

**References**

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PONT-NEDD-FECHAN  
PRN 20978



<b>18977</b>	<b>PRESTEIGNE (Coal trial)</b>			<b>NGR</b>	SO31706340	SO36SW
<b>District</b>	Radnorshire	<b>Community</b>	Presteigne			165 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1912-1914	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Silurian shales of the Llandovery formation.

**Workings**

A run-in inclined shaft exists close to the minor road.

**Transport**

Coal wagons were hauled out of the shaft by a small steam winding engine.

**Power**

The mining was carried out with the aid of compressed air drills and pumps.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

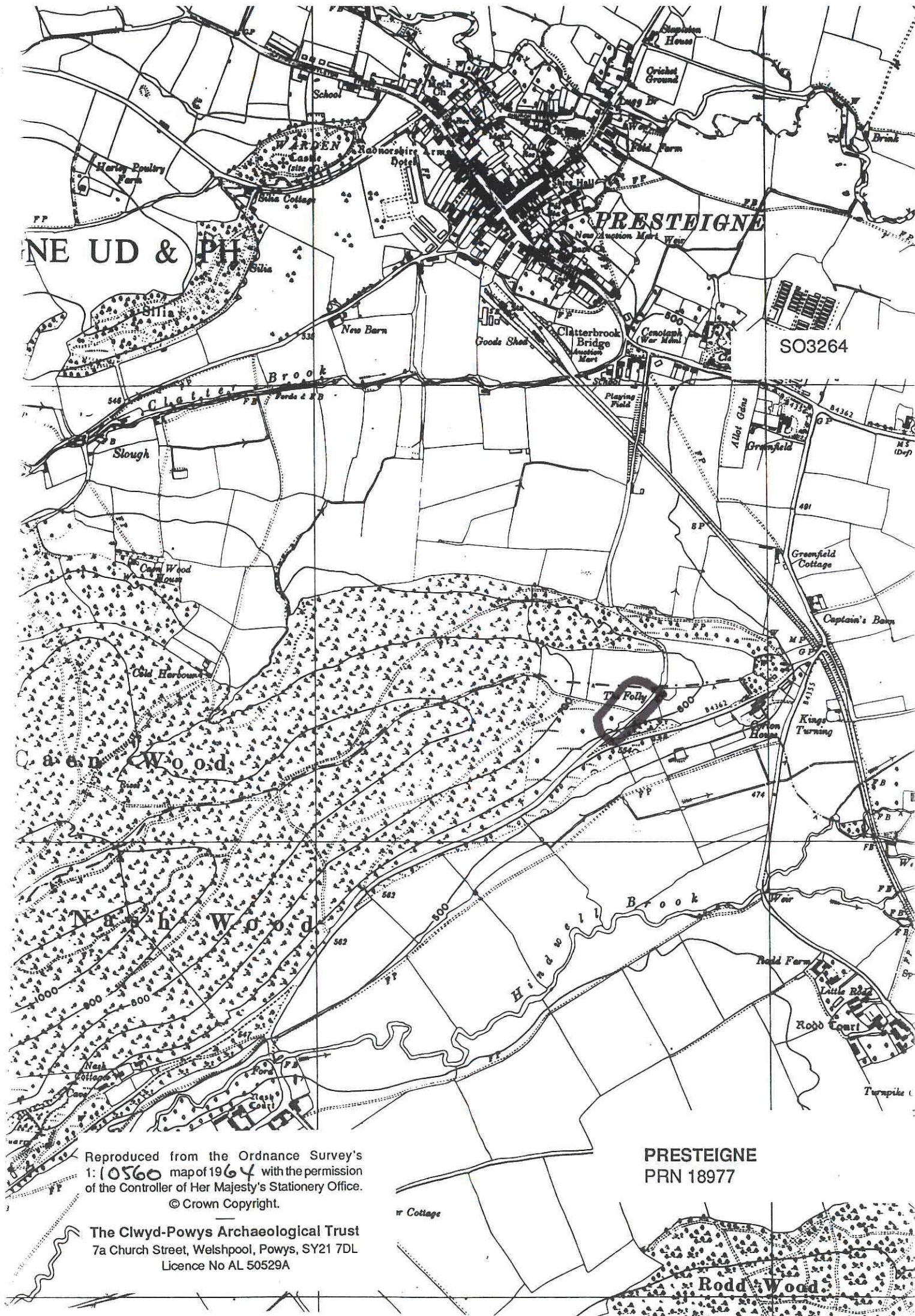
Due to the very limited nature of the archaeology at this site no recommendations are proposed.

**References**

Bick 1991, 70-71

Parker 1983, 10-26





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PRESTEIGNE  
PRN 18977



<b>18997</b>	<b>PWLL-GLAS/TREFEGLWYS (Lead trial)</b>			<b>NGR</b>	SN97408929	SN98NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Trefeglwys			155 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	19th century ?	
<b>Threat</b>	Housing development	<b>Status</b>	None	<b>Land use</b>	Woodland	

**Geology**

Silurian Frongoch formation dark shales/mudstones with quartz mineralisation. No galena or other ores were apparent in the spoil.

**Workings**

A single shaft and surrounding spoilheaps.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping.

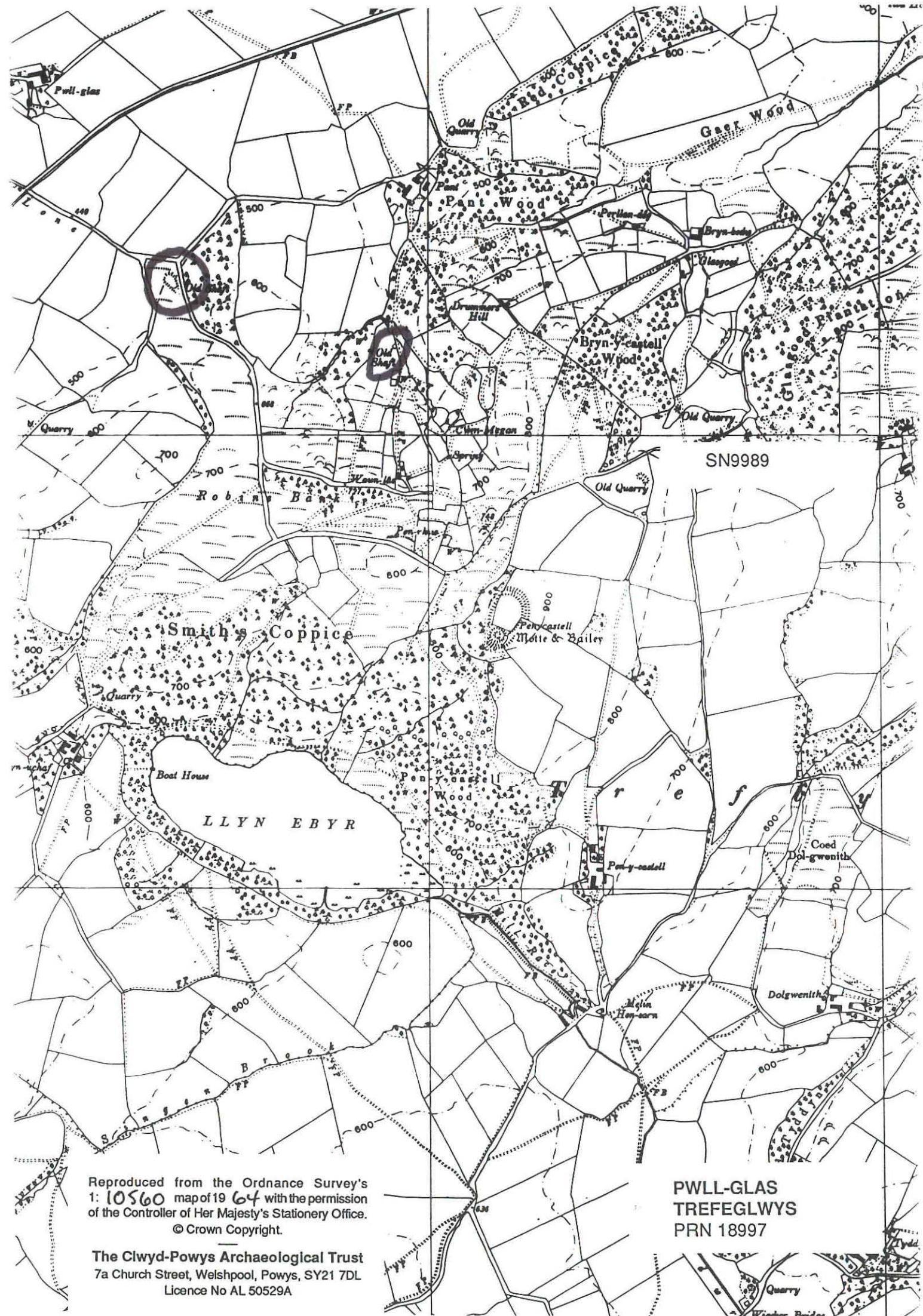
Future woodland planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

**References**

Ordnance Survey 1st Edition 25 inch Map XLII(5)

Regional SMR: Clwyd-Powys Archaeological Trust 1993



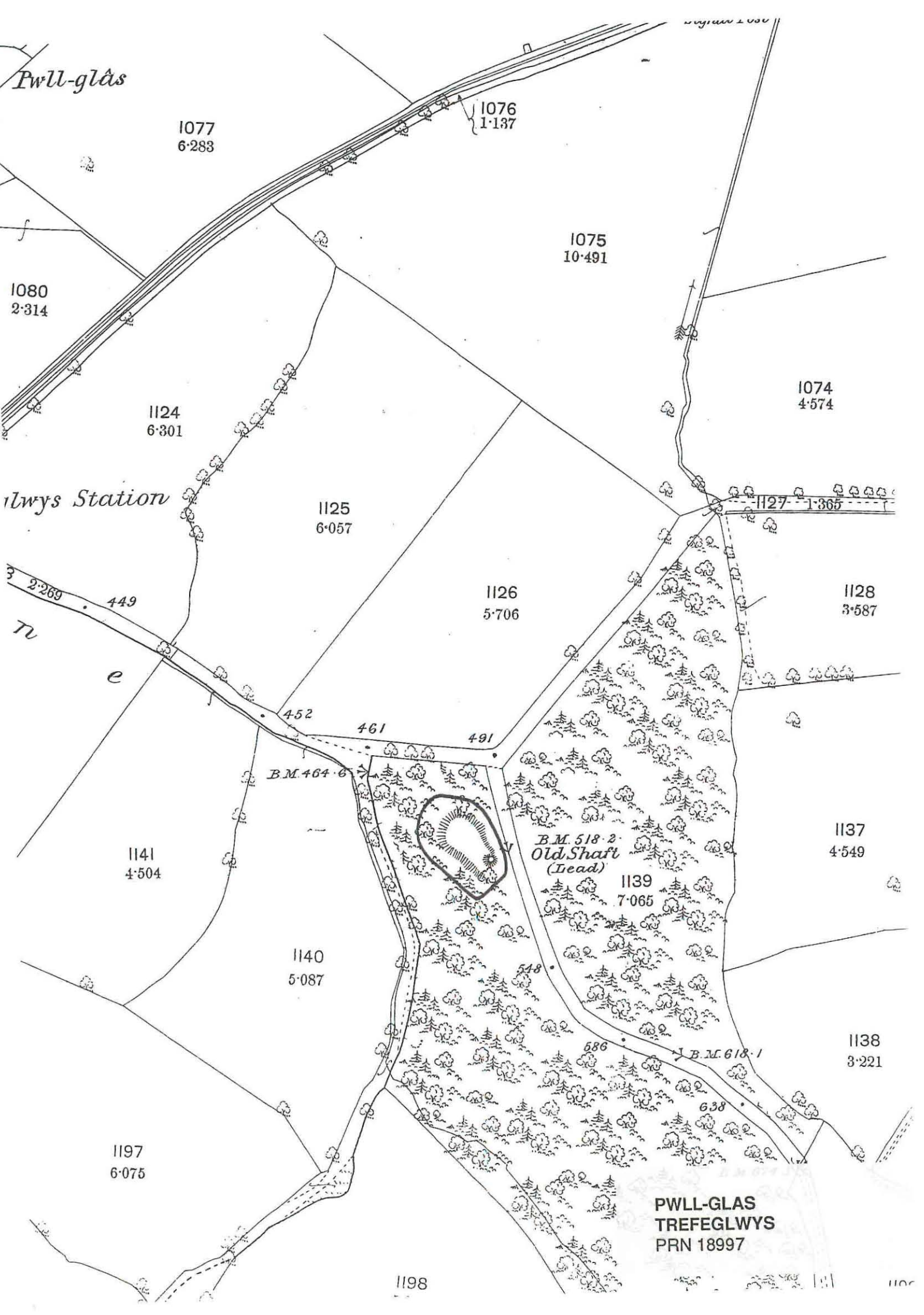


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PWLL-GLAS  
TREFEGLWYS  
PRN 18997





Pwll-glas

1077  
6.283

1076  
1.137

1075  
10.491

1080  
2.314

1124  
6.301

1074  
4.574

ilwys Station

1125  
6.057

1127 1.365

1126  
5.706

1128  
3.587

2.269 449

1141  
4.504

1137  
4.549

B.M. 518.2  
Old Shaft  
(Lead)

1139  
7.065

1140  
5.087

1138  
3.221

1197  
6.075

1198

PWLL-GLAS  
TREFEGLWYS  
PRN 18997



**18976 RHIW-GOCH (Coal trial)****NGR**

SO05666785

SO06NE

**District** Radnorshire**Community** Nantmel310 **mOD****Form** Earthworks**Condition** Damaged**Date** 1820s ?**Threat** None**Status** None**Land use** Pasture/Forestry**Geology**

Ordovician black shales

**Workings**

A filled-in shaft is located at SO05666785 while on the opposite side of the small valley at SO05856770 a run-in level and spoil heap were seen.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

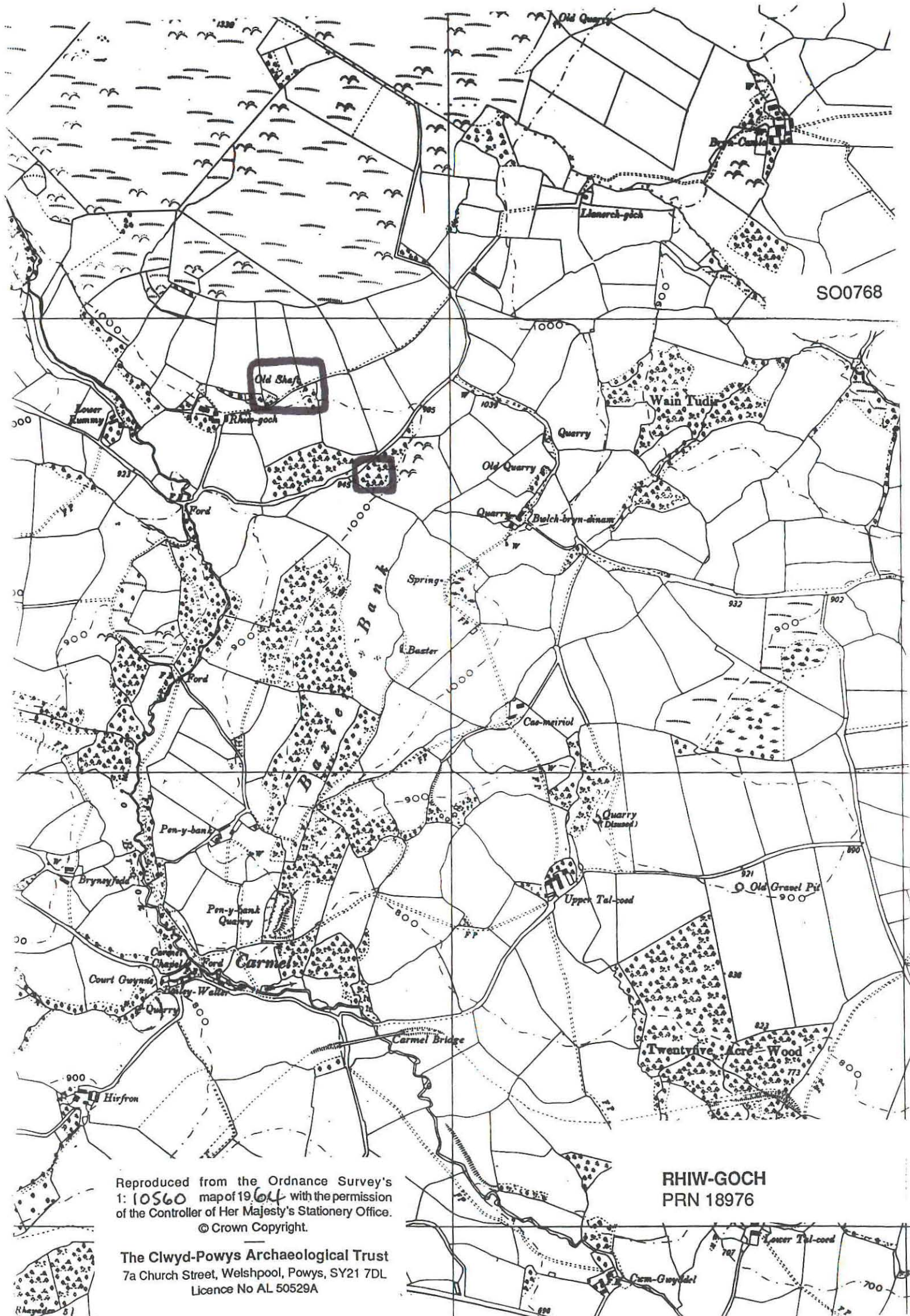
No evidence.

**Recommendations**

Due to the very limited nature of the archaeological remains at this site no recommendations are proposed.

**References**

Bick 1991, 69



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**RHIW-GOCH**  
 PRN 18976



<b>5940</b>	<b>RHOSWYDOL (Lead)</b>			<b>NGR</b>	SN83809730	SN89NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Cadfarch			200 mOD
<b>Form</b>	Structures/Earthworks	<b>Condition</b>	Near Destroyed	<b>Date</b>	12th century ?/18th century/1845-1877	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry/Pasture	

### Geology

Lower Silurian shales and mudstones. Two parallel lodes strike WSW-ENE with galena, sphalerite and barytes mineralisation. There is also a near vertical cross lode striking WNW.

### Workings

At least ten shafts of varying date, four levels and two adits can be seen ascending the hillside of Rhoswydol in the forestry plantation. Old opencut workings are visible on the top of the hill at SN84509768 and consist of a large quarry-like hollow with stoping up to the surface.

### Transport

A tramway runs from the main adit to Greens Mill SN83709765. An incline tramway, connects the dressing floors with the upper workings SN83909740.

### Power

Water was diverted from upstream of Nant Y Fedw in leats contouring the hillside, these fed a pond which distributed water to the top of the crusher wheel.

Greens Mill SN83679783 was powered by a 45ft waterwheel and could be powered by water from either Nant Yr Ych or the Afon Crewi.

A crusher house wheel SN839109740 measuring 30x2ft was located outside Prossers Level.

Three steam engines were used to drive machinery on the upper dressing floors SN83889741 as well as for pumping and winding but details are lacking as to their location.

A pumping engine house known as the Bacheiddon Engine was built in 1860 and was soon after demolished. The earthworks are still visible at SN83809735

### Processing

A crushing mill which housed 2ft diam rollers, 14" wide is located outside Prossers Level in a very ruinous state at SN83909740.

In 1870 Greens Patent Self Acting Dressing Machinery was installed in a mill at SN83669788. This housed crushing rolls, mechanical jiggers, buddles and classifiers. Few internal features can now be discerned although there is almost certainly a large amount of structural detail below the thin topsoil cover. The walls are suffering badly from weathering.

Three ore bins can be seen outside the Bacheiddon deep adit at SN83859735.

### Other features

A carpenters' shop, smiths' shop, a count house and store sheds were also present on the site but are poorly preserved.

### Recommendations

Greens Mill is a rare survival of an early machine driven dressing mill and should be preserved. These features should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for initial consolidation and subsequent regular maintenance.

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

### References

Bick 1990a, 8-11

Bick 1991a, 8-11  
Foster-Smith 1978, 15  
Jones & Moreton 1977, 20  
Jones 1922, 152  
Ordnance Survey 1st Edition 25 inch Map  
Regional SMR: Clwyd-Powys Archaeological Trust 1993

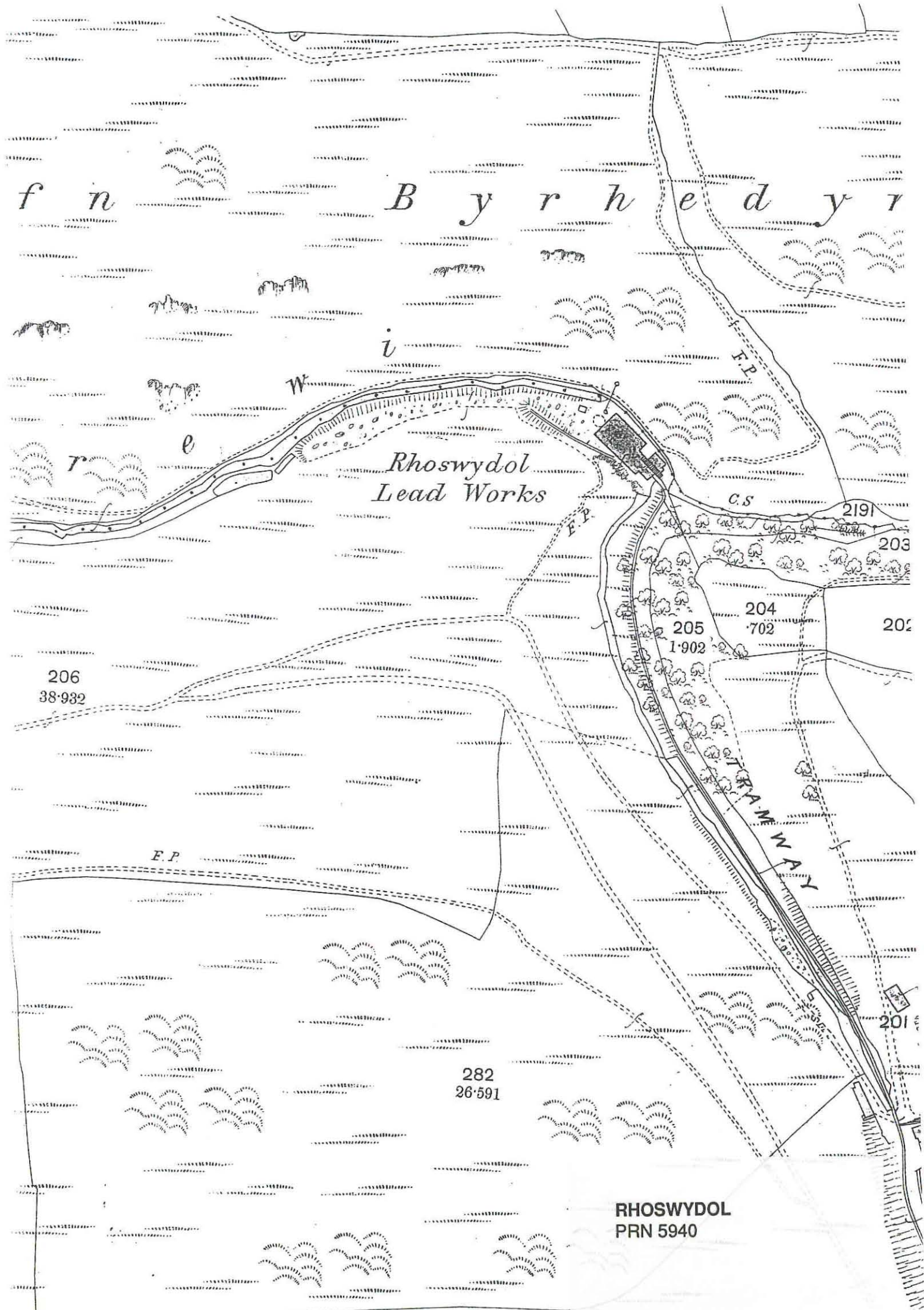
**Photographs**

RCAHMMW 92/CS/1635-1636  
RCAHMMW 925091/53-55  
RCAHMMW 925096/47,51-55











<b>7085</b>	<b>ROUNDTON (Lead/Barytes trials)</b>			<b>NGR</b>	SO29249466	SO29SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Churchstoke			225 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1920	
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b>	Pasture	

**Geology**

Ordovician Stapeley formation volcanics with calcite, barytes and galena mineralisation in an east-west striking vein.

**Workings**

A single level enters the hillside behind 'Green Acres' with a small spoil heap outside

**Transport**

The sleeper impressions of the former tramway can still be seen in the floor of the level.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

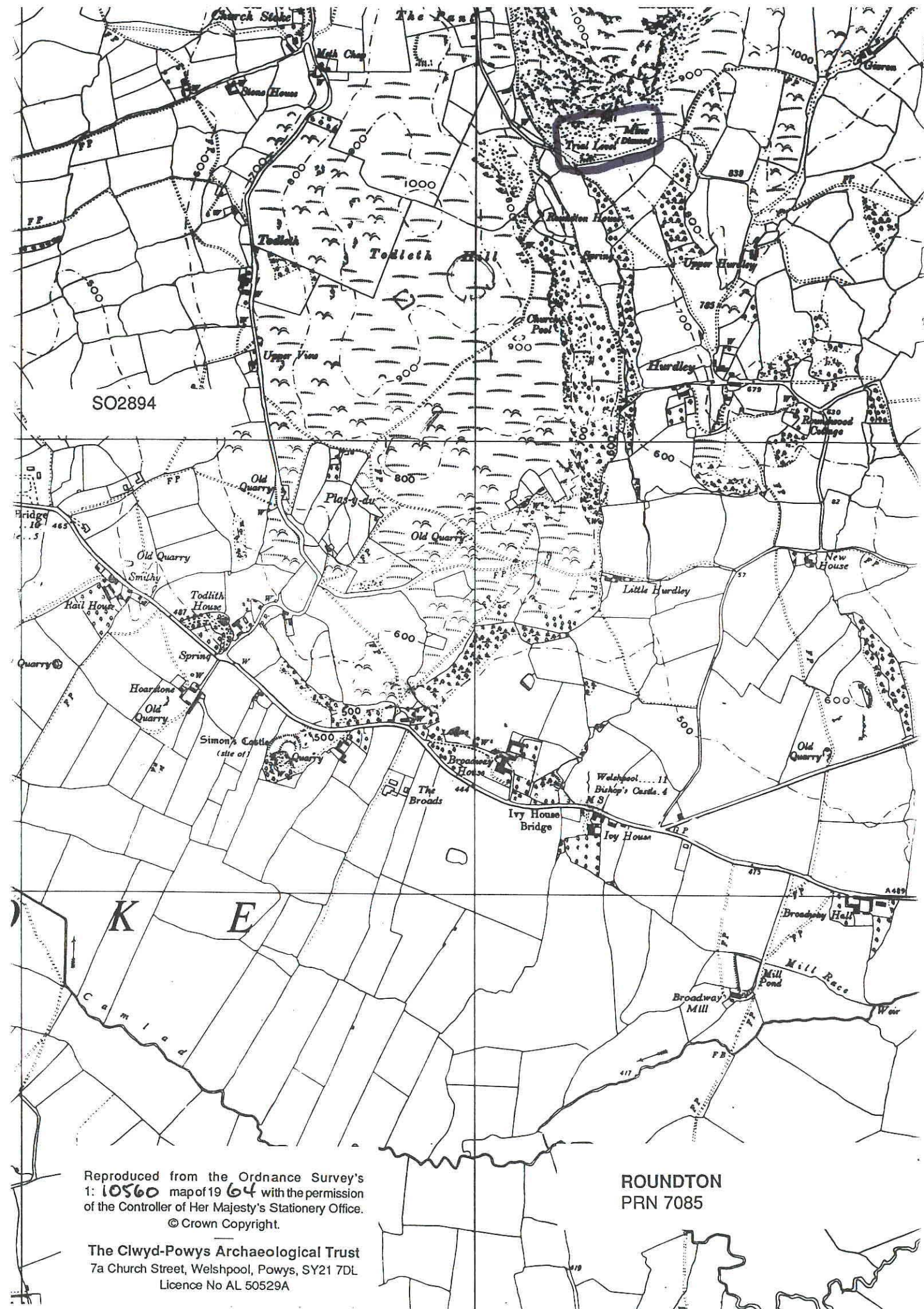
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

**References**

Foster-Smith 1978, 10

Holding 1992, 54

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ROUNDTON  
PRN 7085



<b>8478</b>	<b>SIGLENLAS (Lead/Copper)</b>			<b>NGR</b>	SN86588390	SN88SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			380 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Prehistoric ?/Roman ?/17th century-1868	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry	

**Geology**

Silurian Frongoch formation mudstones. There are three lodes, the main vein striking SW-NE. The vein includes a quartz chalybite and calcite gangue with galena, sphalerite, and chalcopryite.

**Workings**

There are a number of ancient opencuts on the lode displaying traces of copper mineralisation. Trials are also located on this lode. The main workings of the 18th and 19th century were carried on by means of a single shaft and 2 adits at SN86628397.

**Transport**

No evidence.

**Power**

In 1865 a waterwheel was used for pumping and crushing but was apparently unsuited to provide power to both. Traces of this wheelpit survive. The wheel was fed by a leat from a reservoir at SN85208470.

**Processing**

A rotary rake, 2 machine jiggers, and a crusher were present in the 1860s. The wall of a possible set of ore bins can be seen on the 1886 OS map to the east of the crusher.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

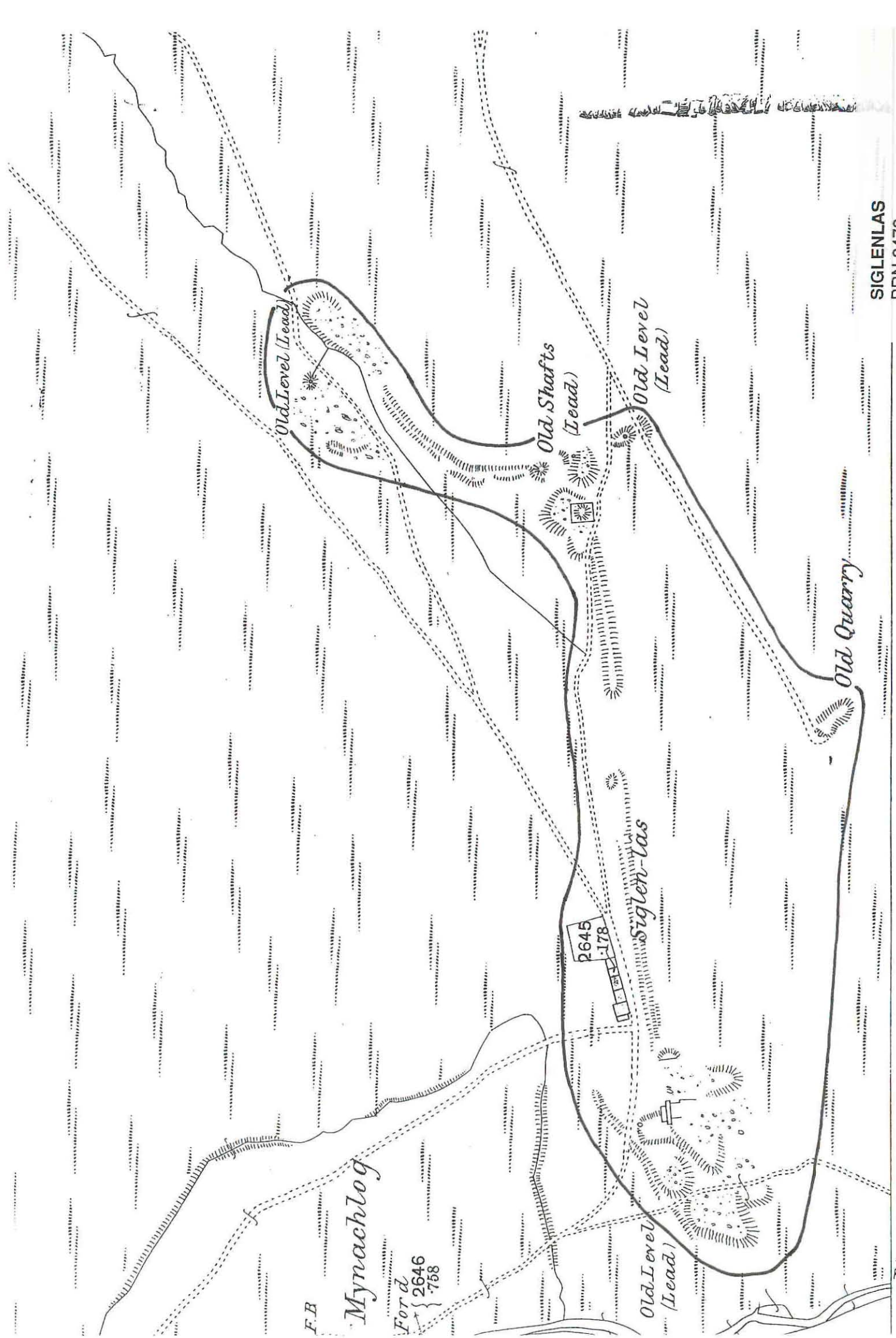
Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 31-32  
 Bick 1991a, 11-17  
 Foster-Smith 1978, 25  
 Jones & Moreton 1977, 21  
 Jones 1922, 175  
 Ordnance Survey 1st Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993







SIGLENLAS

PRN 8478

F u c h e

<b>5864</b>	<b>TALACHDDU (Lead/Copper)</b>	<b>NGR</b>	SO08403425	SO03SE
<b>District</b>	Brecknock	<b>Community</b>	Felin-fach	220 mOD
<b>Form</b>	Earthworks/Documents	<b>Condition</b>	Damaged	<b>Date</b> 18th century/1819
<b>Threat</b>	None	<b>Status</b>	None	<b>Land use</b> Woodland

**Geology**

A north-south striking vein in Old Red Sandstone, which is a local geological curiosity, contains galena, blende and pyrite together with rare gangue minerals including marcarite, chlorite and pyrrhotite and the ubiquitous calcite deposits in dolomite.

**Workings**

These consist of a run in level and shaft by the stream together with a further short trial level at S007203580, which are possibly those worked by David Mushet the 19th century iron master.

**Transport**

Only a short earthwork tramway bed survives out to the spoil tip.

**Power**

No evidence.

**Processing**

Manual processing on-site is evidenced by crushed stone and some fine tailings on the dumps.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

As the geological characteristics of the mine are so unusual the site would be worthy of designation as a Site of Special Scientific Interest (SSSI).

**References**

Bick 1986, 23-26

Hall 1993, 90

Mayberry Collections Volume 1: National Library of Wales 1970, documents 4028 and 4029.

Regional SMR: Clwyd-Powys Archaeological Trust 1993



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<b>18998</b>	<b>TYISAF/CAE CONROY (Lead)</b>			<b>NGR</b>	SN87709790	SN89NE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanbrynmair			200 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Damaged	<b>Date</b>	Roman ?/18thC/1805-1886	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture/Woodland	

### Geology

The lode strikes E-W in Silurian Frongoch and Gwestyn formation rocks with quartz and galena mineralisation.

### Workings

There are five shafts, a deep adit and two levels together with trials and opencuts. The shafts are located at SN87839795, SN87519790, SN87629798 and SN87859815. There is a level at SN87659790 and others at SN87809809. Most of these workings are run-in or within densely wooded areas with difficult access.

### Transport

There are numerous original mine trackways passing through the mine site dressing floors. There are also many examples of the common earthwork traces of tramway beds leading from the workings to the dressing floors. There is a leat from the Cae Conroy valley carrying water to the dressing floors.

### Power

There were two waterwheels present on the site. One of these, located just to the north of Tyisaf Farm at SN87969820, housed a 50x4ft wheel which pumped the engine shaft via 300 yards of flat rods. The other waterwheel located at SN87729809 was used for crushing.

There were undoubtedly smaller wheels for driving the round buddles but the remains are not obvious.

Water was supplied to the leats from the two artificial reservoirs higher up the valley to the west.

### Processing

There was a crusher house/stonebreaker, at least five round buddles, ore bins and picking/washing tables and jigger platforms. There are numerous basal masonry foundations on the dressing floors belonging to the crusher house and the processing mill.

### Other features

There are mine office and storehouse/smithy buildings on the dressing floors area.

### Artifacts

It is recorded in R.Williams 'History of Llanbrynmair' that a small Roman pig of lead was found when cutting foundations for the smithy in Tyisaf.

### Recommendations

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

A detailed measured surface survey of the surviving structural and earthwork features of the mine site is recommended

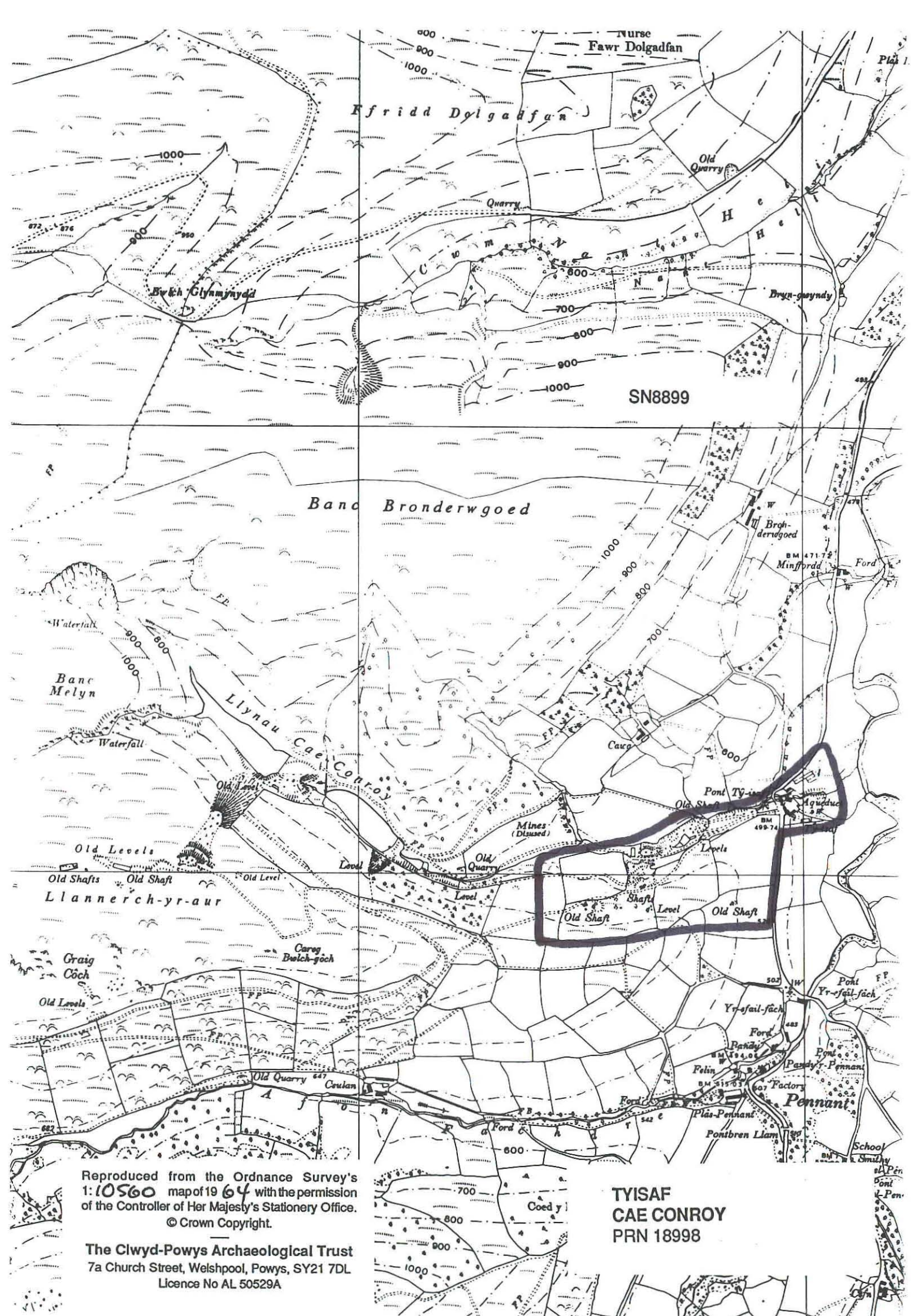
### References

Bick 1990a, 23-24  
 Burt et al 1990, 80  
 Foster-Smith 1978, 14  
 Jones 1922, 150  
 Ordnance Survey 1st Edition 25 inch Map XXXIV(1)  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993  
 Williams 1888

### Photographs

RCAHMW 925095/48-49



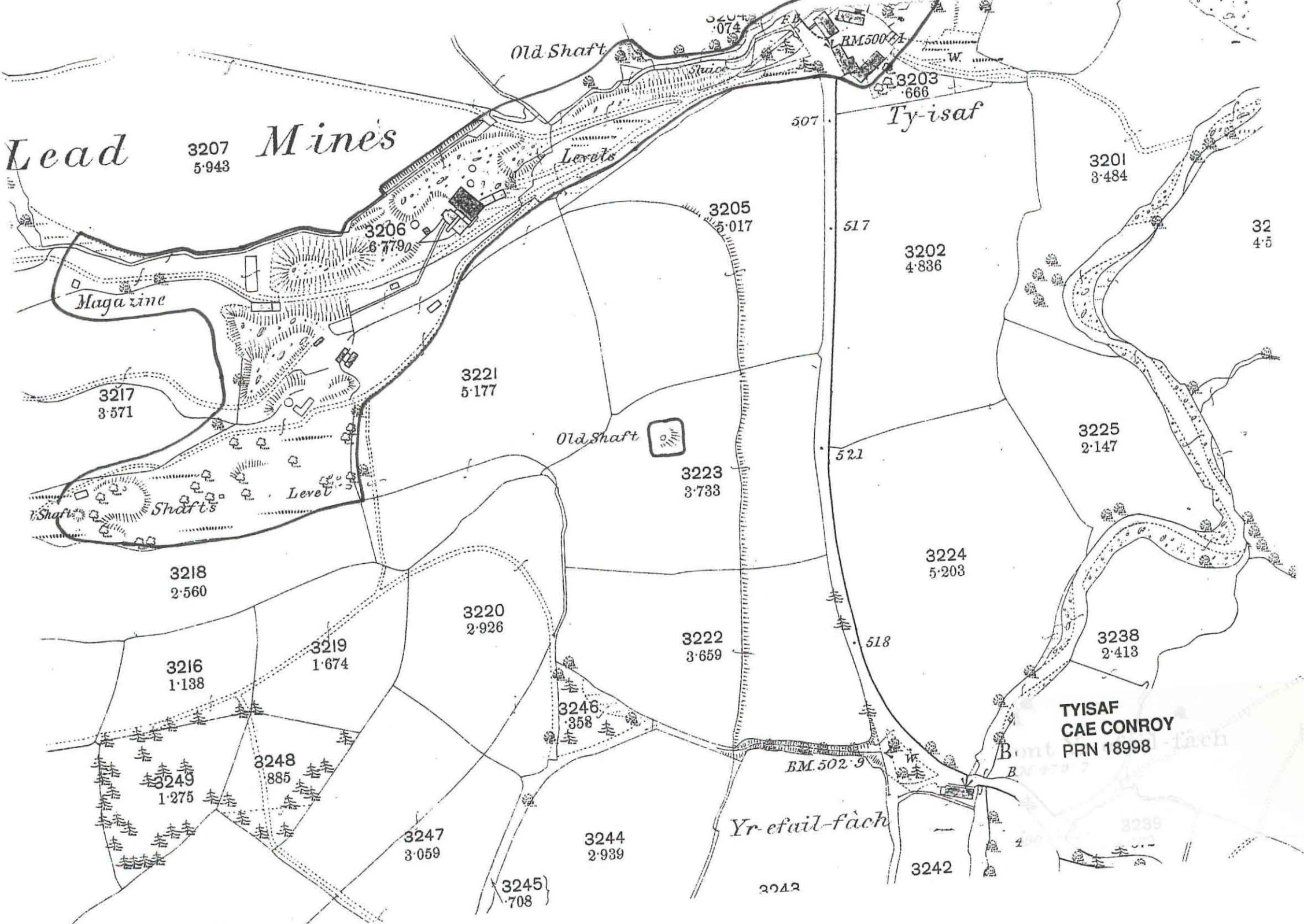


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TYISAF  
CAE CONROY  
PRN 18998







<b>18999</b>	<b>TYLWCH (Lead)</b>			<b>NGR</b>	SN96208068	SN98SE
<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			235 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Damaged	<b>Date</b>	1855-1857	
<b>Threat</b>	Forestry	<b>Status</b>	None	<b>Land use</b>	Forestry/Pasture	

**Geology**

Silurian Frongoch formation mudstones and shales with galena mineralisation in a single north-south striking lode.

**Workings**

Six levels descend the hillside with four at SN96208070 and two on the south side of the Afon Dulas at SN96068065. There is a further single level to the north-east at SN95838105. Most of these levels are run-in.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Future forestry planting, thinning and felling proposals should avoid further disturbance to the surviving remains of the mine.

Aerial photographic survey of this mine site is recommended for enhancement surface detail.

**References**

Bick 1990a, 52

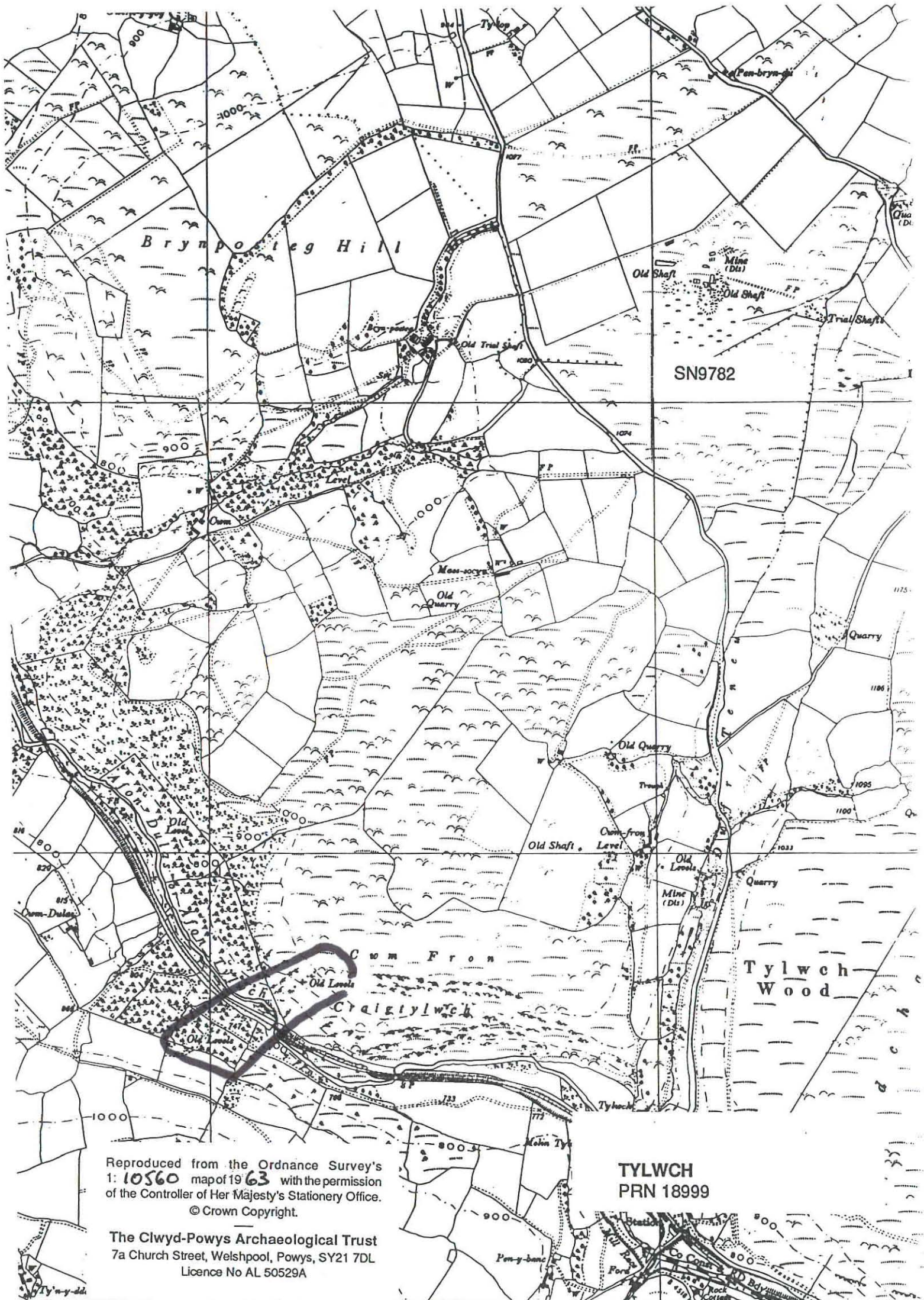
Foster-Smith 1978, 31

Jones 1922, 1,167,170

Ordnance Survey 1st Edition 25 inch Map XLVIII(9)

Regional SMR: Clwyd-Powys Archaeological Trust 1993



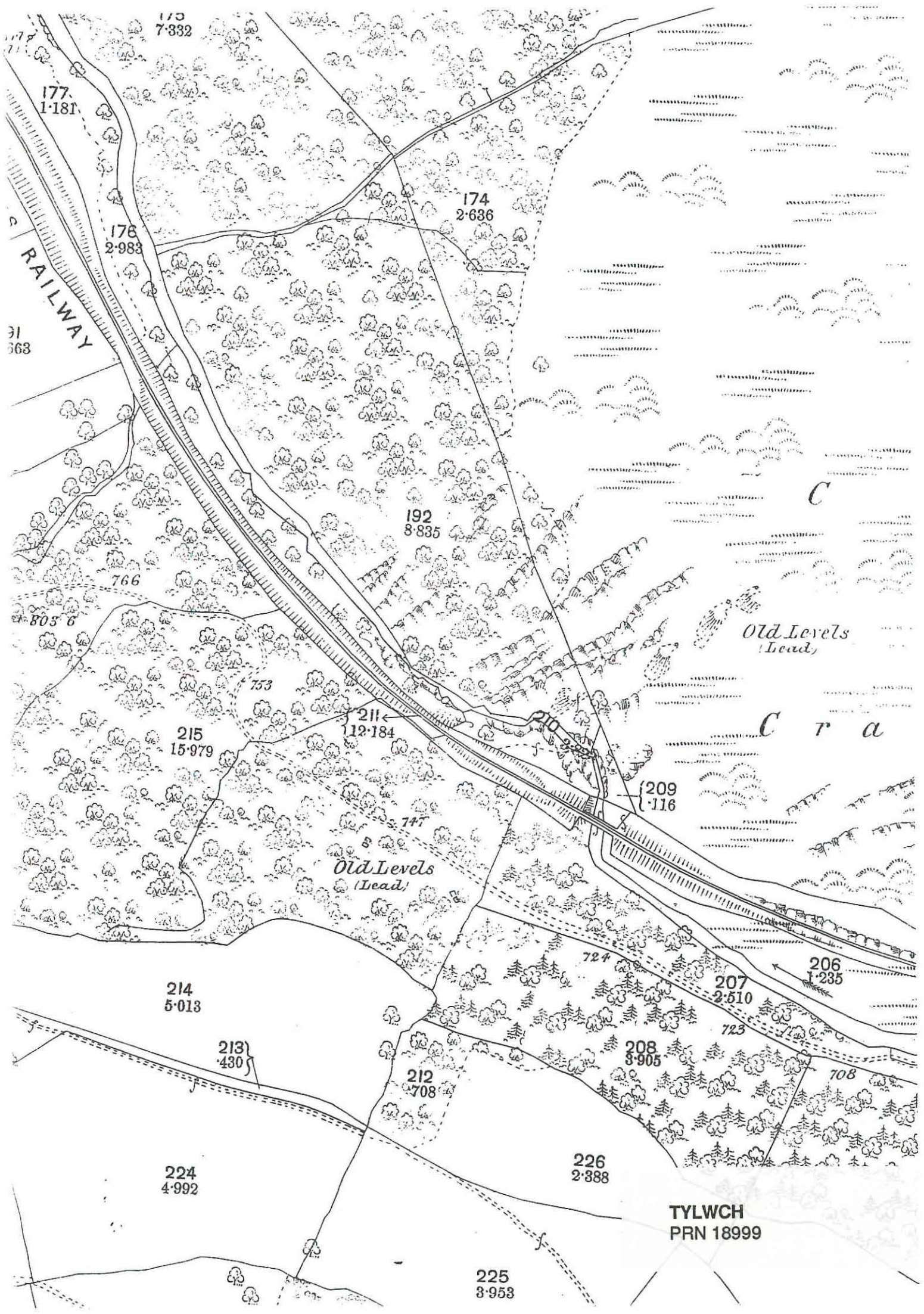


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TYLLWCH  
PRN 18999





173  
7-332

177  
1-181

178  
2-983

174  
2-636

192  
8-835

766

803 6

753

215  
15-979

211  
12-184

Old Levels  
(Lead)

214  
5-013

213  
430

224  
4-992

212  
708

226  
2-388

225  
3-953

209  
1-116

724

207  
2-510

208  
3-905

206  
1-235

723

708

TYLWCH  
PRN 18999

Old Levels  
(Lead)

C r a

**18974 TYN Y COED (Coal trials)****NGR**

SO11205823

SO15NW

**District** Radnorshire**Community** Glascwm

260 mOD

**Form** Earthworks**Condition** Damaged**Date** 1830s**Threat** None**Status** None**Land use** Forestry/Pasture**Geology**

Silurian black shales altered by igneous intrusion.

**Workings**

A run-in level and its spoil heap can be found at the base of the small wood below the farmhouse.

**Transport**

No evidence.

**Power**

No evidence.

**Processing**

No evidence.

**Other features**

No evidence.

**Recommendations**

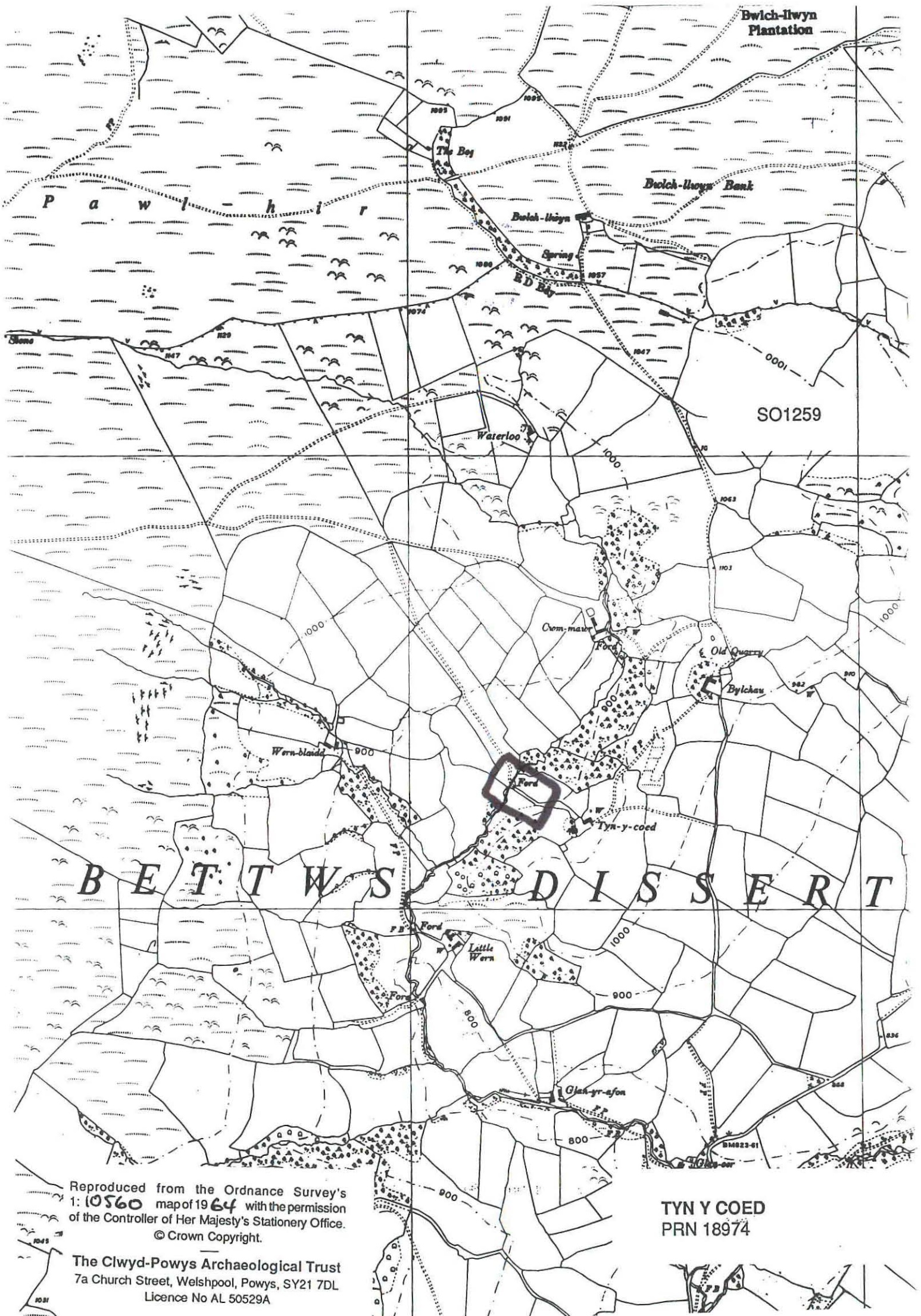
In view of the small size of this trial and the lack of significant archaeological remains no recommendations are proposed.

**References**

Bick 1991, 68

Murchison 1839





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TYN Y COED  
PRN 18974



<b>5936</b>	<b>VAN (Lead)</b>			<b>NGR</b>	SN94258760	SN99NW
<b>District</b>	Montgomeryshire	<b>Community</b>	Llanidloes Without			170 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	1850-1920	
<b>Threat</b>	Reclamation	<b>Status</b>	None	<b>Land use</b>	Wasteland	

**Geology**

Lower Silurian Gwestyn formation and Ordovician Van formation shales and mudstones. The main vein strikes NE-SW with a northern branch. Mineralisation includes galena and zinc.

**Workings**

These include five shafts, 3 adits and levels. Some early trial adits are located at SN94208810.

**Transport**

3 inclines were constructed up to Seahams shaft from the dressing floors. One of these inclines aided the haulage of coal to feed the engine. Others lowered ore to the crushers.

An incline ran from the slimes settling tanks to the slimes dump.

A standard gauge railway connection to Caersws was created in 1871 as a branch of the Cambrian Line for hauling concentrate as well as passengers. Much of this line still exists.

A tramway embankment conveyed stone from the nearby quarry to Seahams shaft.

**Power**

The 50ftx4ft Mary Emma waterwheel constructed in 1866 was used to pump the Old Engine shaft until the erection of the former Blencowe Consols Engine in 1875. Thereafter the wheel was used to drive a crusher. The remains of the waterwheel pit can still be seen.

In c.1890 there were as many as thirteen engines of various sizes working at Van. They were used for pumping, winding, processing and compressing.

A gas producer was erected in 1916 and the foundations for this were rediscovered in June 1992 during the first stage of archaeological works prior to the current reclamation scheme (Hughes SJS. 1992)

The halvans plant engine and an engine base at the foot of the stone piers were also discovered during excavations in May/June 92. They are both designated for preservation

**Processing**

Between 1865-1871 an extensive dressing and crushing plant was erected which consisted of two crusher houses, stamps, buddles, jiggers and slime pits.

A halvans mill was added in 1876 for reprocessing the spoil tips. The plant included a unique set of steam driven stamps.

A mineral separation brine plant built in 1912 exists as concrete foundations to the east of the main mine area and was later used as a paintworks in the 1930s.

**Other features**

Also present on the mine site were a sawmill, coalhouses, carpenters shop, mine office and a loading bay or surge bin to hold ore trammed out of the main adit.

The Ceryst and other culverts diverted water from Llyn Y Fan through the dressing area. A large dam (SN92808780) was constructed in the valley to the west to provide water at the dressing floors.



Many of the buildings within the village are former mining accommodation/ administration offices. The miners' chapel and associated library can be seen at SO94928770.

---

### Recommendations

The octagonal yellow brick chimney stack at Seahams shaft c.1869 should be preserved. This feature should be recommended for scheduling as ancient monuments and should be managed under an appropriate agreement that provides for its initial consolidation and subsequent regular maintenance.

Of the buildings revealed in recent archaeological investigations prior to reclamation and landscaping the No.9 engine and boilerhouse foundations, the foundations of the gas producer furnace and the halvans enginehouse remains are the most important features and all efforts should be made to preserve these structures in situ, if necessary by the refusal of future planning permissions.

Preservation should also be extended where possible to the other surviving building remains in the vicinity of the gas producer and in the area of the No.3 and No.10 crusherhouses, if necessary by the refusal of future planning permissions.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

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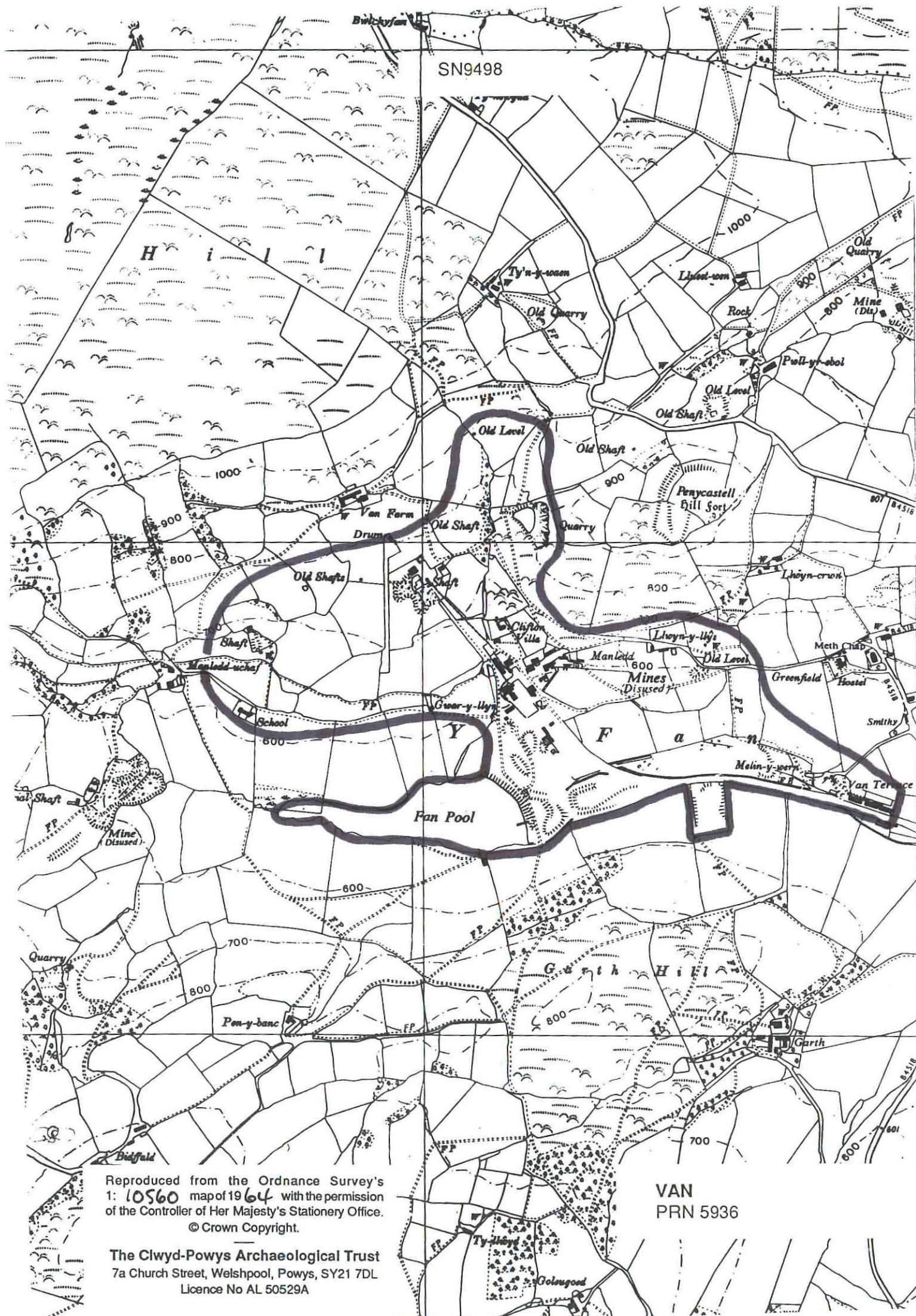
### References

Bick 1990a, 41-46  
 Bick 1991b, 1-13  
 Foster-Smith 1978, 27  
 Glamorgan-Gwent Archaeological Trust 1993  
 Hamer 1872, 29  
 Hamer 1872, 29-32  
 Hughes 1991  
 Hughes 1992  
 Jones & Moreton 1977, 21  
 Jones 1922, 3,5,18,44,157,161  
 Ordnance Survey 2nd Edition 25 inch Map  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

### Photographs

CPAT 164.  
 CPAT CS92/20/01-35  
 CPAT CS92/21/03-07  
 CPAT CS92/26/20-36  
 RCAHMMW 92/CS/1373,1556-1559,1665  
 RCAHMMW 925075/41  
 RCAHMMW 925088/49-54



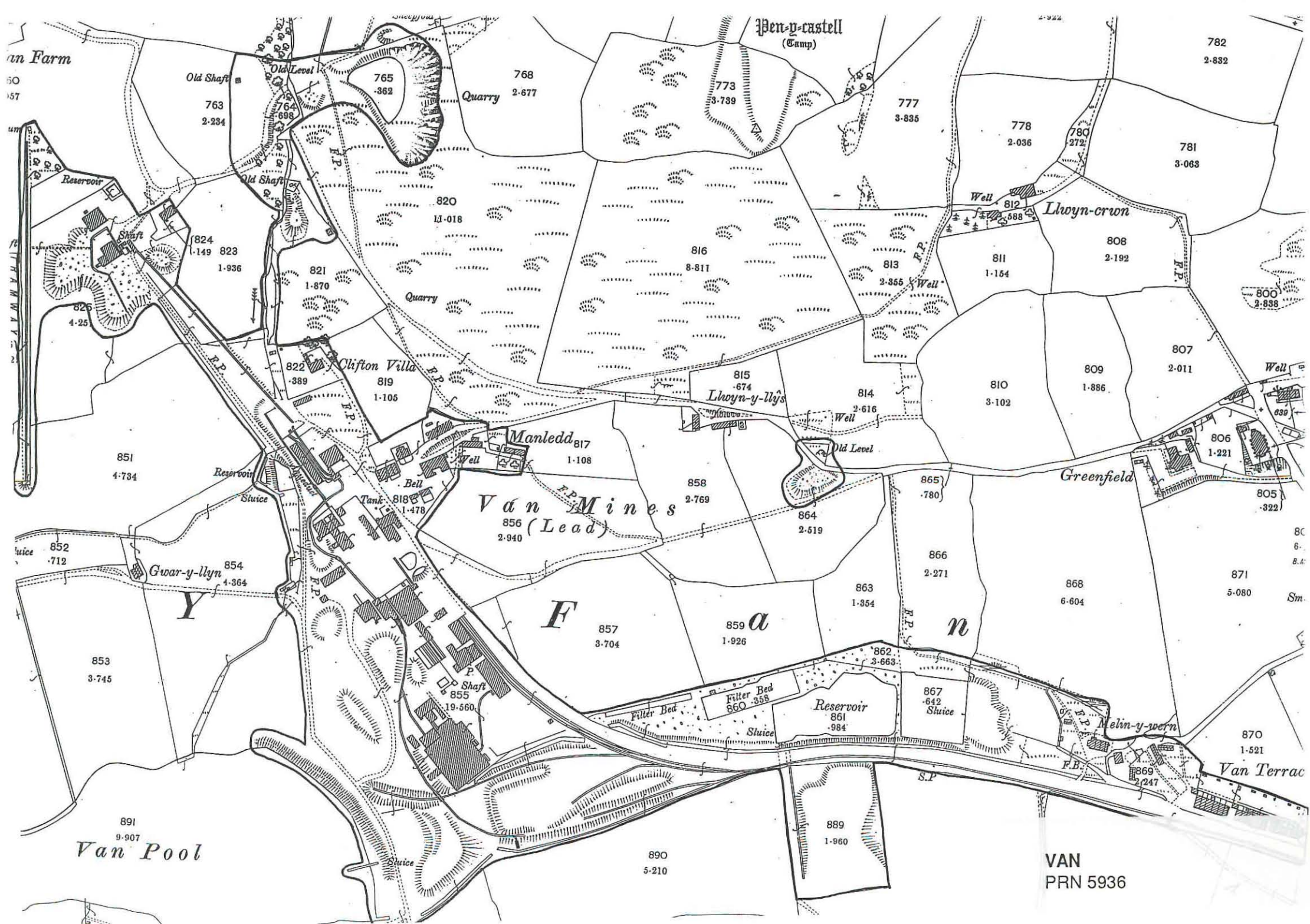


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VAN  
PRN 5936





<b>18972</b>	<b>WEST FEDW (Lead/Zinc/Copper)</b>			<b>NGR</b>	SN97307910	SN97NE
<b>District</b>	Radnorshire	<b>Community</b>	St.Harmon			340 mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	1870-1871	
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Woodland/Pasture	

**Geology**

The main vein trends NE-SW in Silurian rocks with zinc, lead, pyrite and chalcopyrite mineralisation.

**Workings**

The deep adit can be seen at SN97927953. The upper shaft is filled and was not located while the lower shaft lies just below the road at SN97657930 and has also been filled. Only the blocked upper level at SN97307905 is now readily identifiable.

**Transport**

No evidence.

**Power**

An engine house with a double acting rotary engine and 36" cylinder was built in 1870 to pump at both shafts.

**Processing**

No evidence.

**Other features**

A caprenters and smiths shop together with storehouses and two cottages are recorded on the site. Foundations of the structures are still present, some of which have been re-used in farm buildings alongside the present farm track at SN97407915.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

Aerial photographic survey of this mine site is recommended for enhancement of surface detail.

**References**

Foster-Smith 1978, 33

Hall 1993, 78

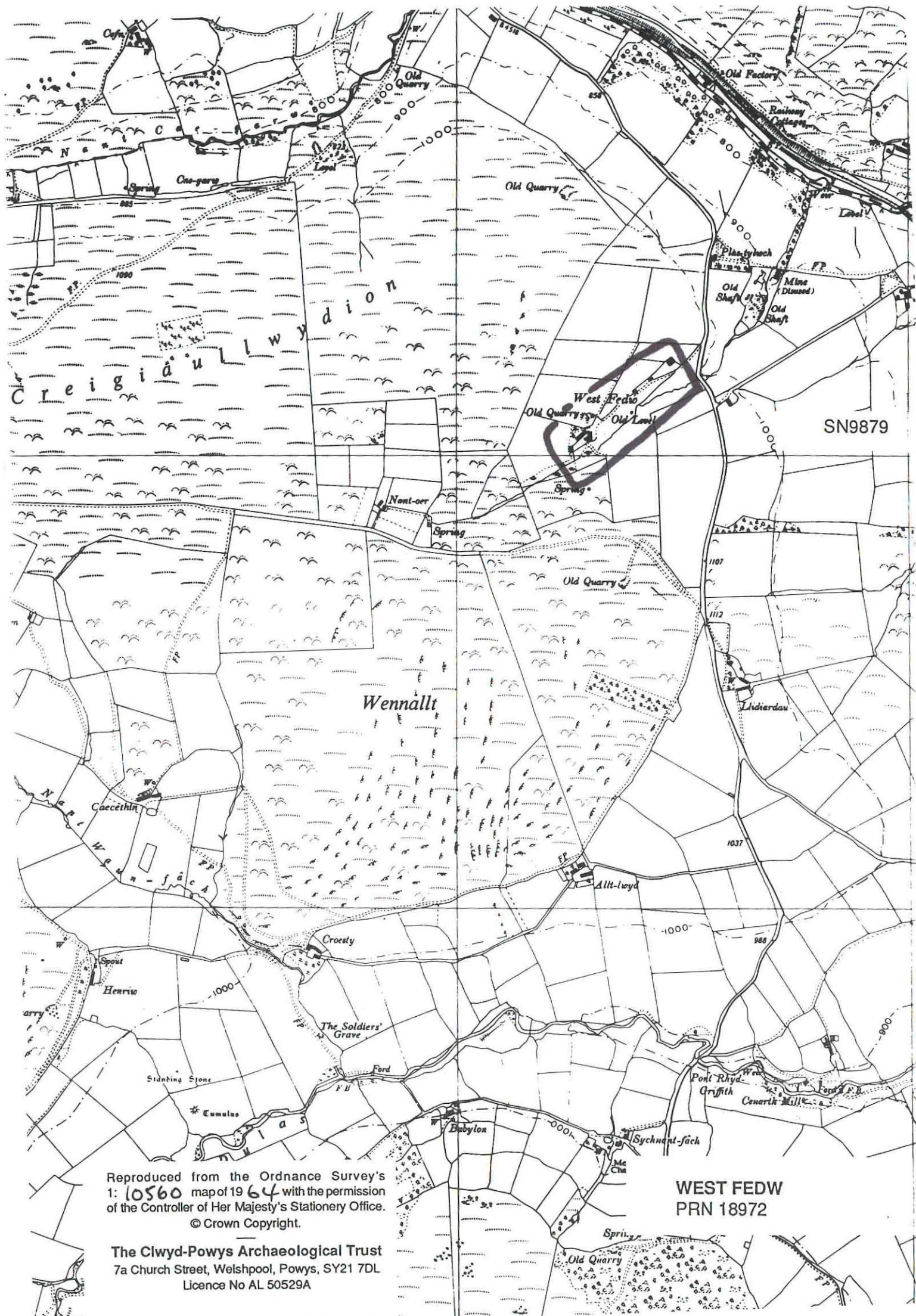
Ordnance Survey 1st Edition 25 inch Map

Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

CPAT CS93/41/27-28,32-33



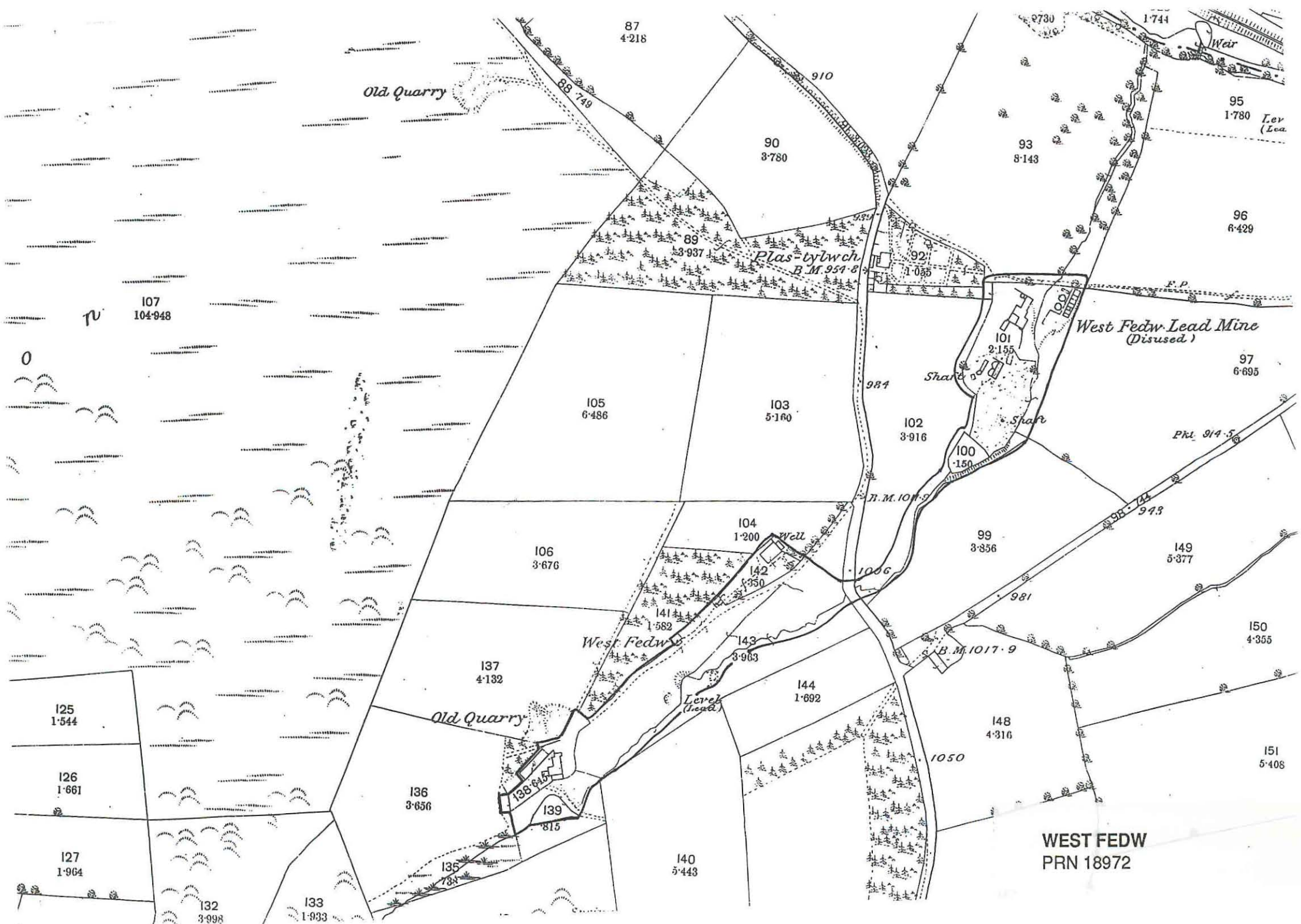


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WEST FEDW  
PRN 18972





WEST FEDW  
PRN 18972



**8474 WEST WYE VALLEY (Lead/Zinc)****NGR**

SN82328465

SN88SW

<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig			380	mOD
<b>Form</b>	Earthworks/Structures	<b>Condition</b>	Near Destroyed	<b>Date</b>	1846-1880		
<b>Threat</b>	Forestry/Farming	<b>Status</b>	None	<b>Land use</b>	Pasture/Forestry		

**Geology**

Silurian Frongoch Formation. The veins trend on a NE-SW strike and are part of an extension of the Castell vein to the west. Mineralisation includes lead, silver and zinc.

**Workings**

The western workings consist of two shafts at SN82138453, SN82458478 and an adit at SN82468480.

**Transport**

Short stretches of tramway extend from the shaft to the spoil heaps on the western mine.

**Power**

The 1869 pumping, winding and sawmill waterwheel was supplied by a leat from the Cyff Brook on the western side of the River Wye. A 30ft wheel powered the crusher. A large reservoir is located at SN83158521 which supplied water to the dressing floors.

**Processing**

The western dressing floors had the usual range of ore bins, a crusher, jigs and buddles. A small reservoir is present. The present remains are poorly preserved at basal foundation level.

**Other features**

Four miners cottages were built in 1876 on the western mining area. Traces of the foundations can be seen. There are also remains of a mine office and possible smithy/carpenters shop.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

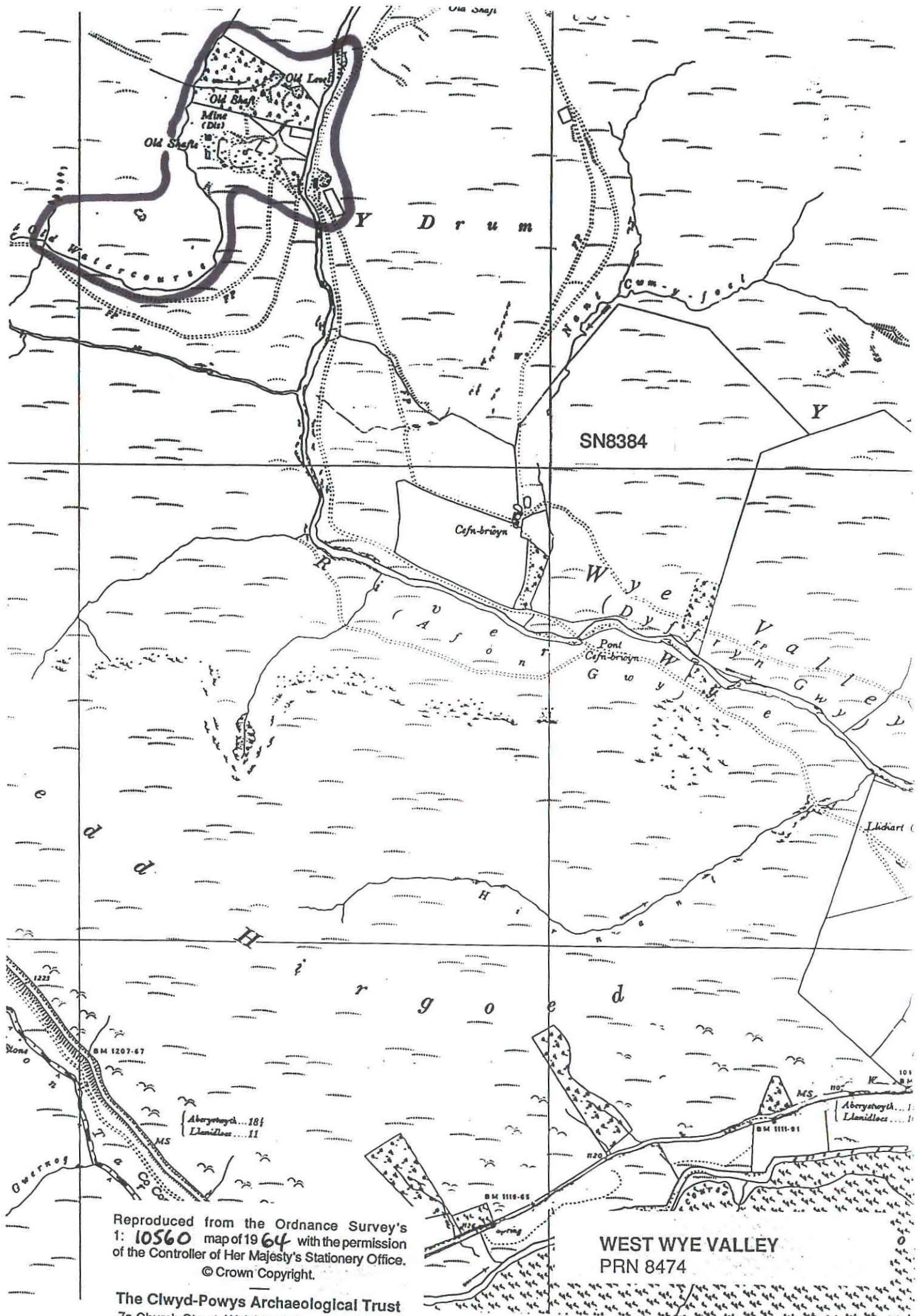
Future forestry planting, thinning and felling proposals should avoid disturbance to the surviving remains of the mine.

**References**

Bick 1990a, 53-56  
 Foster-Smith 1978, 21  
 Jones & Moreton 1977, 22  
 Jones 1922, 4, 47 165  
 Ordnance Survey 1st Edition 6 inch Map XLVI  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 92/CS/1376-1378, 1664  
 RCAHMMW 925075/45-46



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**18979 WYE VALLEY (Lead)**

NGR SN82658510 SN88NW

<b>District</b>	Montgomeryshire	<b>Community</b>	Llangurig		380 mOD
<b>Form</b>	Earthworks	<b>Condition</b>	Destroyed	<b>Date</b>	1846-1880
<b>Threat</b>	Farming	<b>Status</b>	None	<b>Land use</b>	Pasture/Farming

**Geology**

The workings are on a branch vein of the main NE-SW lode in Nant Y Gwrdd. Exposure of the vein here displays a quartz brecciated gangue in rocks of the Silurian Frongoch formation.

**Workings**

Four shafts (SN83158506, SN82988501, SN82868499) and an adit (SN82818505). The earlier engine shaft is drained by an adit crosscut with extensive stoping above adit. A second shaft was sunk in 1879.

**Transport**

No evidence.

**Power**

A reservoir on Nant Y Gwrdd at SN83138521 drove the dressing floors to the west.

**Processing**

In 1874/5 a self acting dressing plant was installed on the dressing floors SN82698510 but this is now almost totally destroyed by clearance for farm buildings and parking areas.

**Other features**

No evidence.

**Recommendations**

Where development is proposed pre-planning archaeological evaluation may be necessary, depending on its size and nature, to frame an appropriate archaeological response.

An archaeological watching brief should be an expected minimum response to permitted future development proposals on this site.

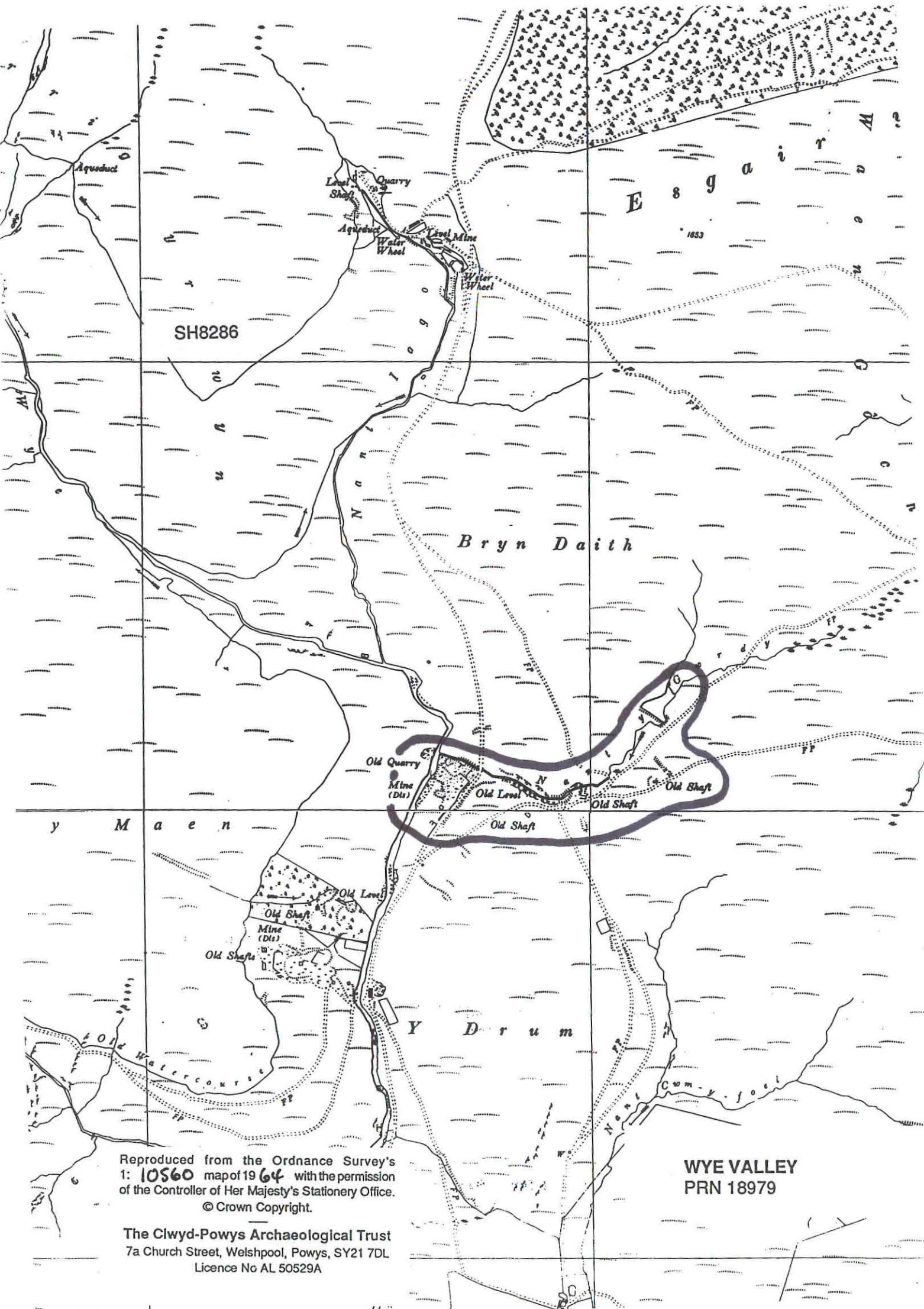
As there is insufficient information regarding the underground preservation and characteristics of the mine workings it is recommended that a detailed sub-surface survey should be carried out prior to a decision on any proposals involving shaft capping and blocking of levels.

**References**

Bick 1991, 53-56  
 Foster-Smith 1978, 22  
 Jones 1922, 4, 47, 165  
 Ordnance Survey 1st Edition 6 inch Map XLVI  
 Regional SMR: Clwyd-Powys Archaeological Trust 1993

**Photographs**

RCAHMMW 92/CS/1376-1378, 1664  
 RCAHMMW 925075/45-46



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WYE VALLEY  
PRN 18979



## APPENDIX CONCORDANCE OF MINE NAMES

### Brecknock

5511	DALRHIW	Llanwrthwl	SN88566079
5512	NANTYGARW	Llanwrthwl	SN87436060
5513	NANT Y CAR (NORTH)	Llanwrthwl	SN89086192
5517	NANTYBRAIN/ABERGWESYN	Llanwrtyd Wells	SN83205045
5518	CEFN COCH	Llanwrtyd Wells	SN84005355
5864	TALACHDDU	Felin-fach	SO08403425
18992	NANT GYRNANT	Llanwrtyd Wells	SN85804740
18994	NANT Y CAR (SOUTH)	Llanwrthwl	SN88676090
20978	PONT-NEDD-FECHAN	Ystradfellte	SN903097

### Montgomeryshire

30	LLANYMYNECH OGOF	Carreghofa	SJ26602222
725	NANT-YR-EIRA	Llangurig	SN82708730
1042	NEWTOWN	Newtown	SO09609100
1842	BRYNTAIL	Llanidloes Without	SN91338685
3673	NANTY/PANTMAWR	Llangurig	SN85258210
5077	BACHEIDDON	Cadfan	SN83709708
5648	DYLIFE	Llanbrynmaur	SN85609390
5925	CWM OROG	Llangynog	SJ052273
5927	BWLCH CREOLEN	Llanrhaeadr-ym-Mochnant	SJ09752305
5936	VAN	Llanidloes Without	SN94258760
5937	EAST VAN	Llanidloes Without	SN94958850
5938	PENYCLUN	Llanidloes Without	SN93098730
5939	GORN	Llanidloes Without	SN98008400
5940	RHOSWYDOL	Cadfan	SN83809730
5941	LLANERCHYRAUR	Llanbrynmaur	SN86759820
5942	DYFNGWM/CASTLE ROCK	Llanbrynmaur	SN84909310
5943	GWESTYN	Llanidloes Without	SN89408610
5944	NANTIAGO	Llangurig	SN82608632
6158	HYDDGEN	Cadfan	SN78209070
6160	CWMBYR	Cadfan	SN78639475
6804	BERWYN	Llangynog	SJ01382943
7085	ROUNDTON	Churchstoke	SO29249466
8430	CRAIG RHIWARTH/N LLANGYNOG	Llangynog	SJ05552656
8433	LLANGYNOG	Llangynog	SJ05502555
8438	CRAIG-Y-MWYN	Llanrhaeadr-ym-Mochnant	SJ07422852
8448	CWMBYCHAN	Glanwymyn	SH85850110
8451	CWMRHAIADR	Cadfan	SN75559465
8458	MACHYNLLETH PARK LODGE/WITCHES CAVE	Machynlleth	SH76050011
8460	CEULAN	Llanbrynmaur	SN86209740
8461	BRYNFEDWEN	Llanbrynmaur	SN85509701
8474	WEST WYE VALLEY	Llangurig	SN82328465
8476	NANTYRICKET	Llangurig	SN86558678
8478	SIGLENLAS	Llangurig	SN86588390
8479	GEUFRON	Llanidloes Without	SN88588570
8480	ABERDAUNANT	Llanidloes Without	SN90658655
8484	BRYNPOSTIG	Llanidloes Without	SN97128222
8485	ALLT-Y-MAIN	Meifod	SJ163144
8497	CYFARTHFA/NANT DDU	Cadfan	SN83409307
8853	CLIFFDALE	Churchstoke	SO30209763
18969	CWM-FRON/EAST CWM-FRON	Llangurig	SN971809
18970	MELINYGLOCH	Aberhafesp	SO06649434
18971	LLANYMYNECH	Carreghofa	SJ26602222
18973	CWMGWEN	Llanfyllin	SJ083221
18979	WYE VALLEY	Llangurig	SN82658510
18980	CALCOT	Churchstoke	SO29769721
18981	CLOCHNANT	Pen-y-Bont-Fawr	SJ04412293
18982	CRAIG DDU	Pen-y-Bont-Fawr	SJ06152395
18984	FRON-FELIN	Llanbrynmaur	SH87250071
18985	GLASLYN	Cadfan	SN81289425

18986	GLYN
18987	HAFODFEDDGAR
18988	MAESNANT
18990	MIDDLETOWN HILL
18991	MOEL FADIAN
18993	NANT Y BLAIDD
18995	NANTMELIN
18996	NEWCHAPEL/CWM-MAWR
18997	PWLL-GLAS/TREFEGLWYS
18998	TYISAF/CAE CONROY
18999	TYLWCH

Llanidloes Without	SN92478724
Llangurig	SN87558585
Llangurig	SN85368666
Trewern	SJ30931322
Cadfarch	SN83019490
Llanrhaeadr-ym-Mochnant	SJ09032833
Llanidloes Without	SN86008772
Llandinam	SN98958335
Trefeglwys	SN97408929
Llanbrynmair	SN87709790
Llangurig	SN96208068

# Radnorshire

1100	CEFN-PAWL
5945	CWM ELAN
8436	FEDW/St.HARMON
8487	GWAITH Y MWYN
18972	WEST FEDW
18974	TYN Y COED
18975	LLWYN MADOC
18976	RHIW-GOCH
18977	PRESTEIGNE
18978	LLANDRINDOD
18983	CWM BACH
18989	MARCHEINI FACH/DROSGOL

Beguildy	SO17107983
Rhayader	SN90006510
St.Harmon	SN97657930
Nantmel	SN999678
St.Harmon	SN97307910
Glascwm	SO11205823
Glascwm	SO08505515
Nantmel	SO05686785
Presteigne	SO31706340
Llandrindod Wells	SO06605935
Rhayader	SN94406980
St.Harmon	SN95657413