

**MINERALS**  
**AN ARCHAEOLOGICAL ASSESSMENT OF**  
**MINERAL EXTRACTION SITES AND RESOURCES IN GWYNEDD**  
**WITHIN THE SNOWDONIA NATIONAL PARK**



Gwynedd Archaeological Trust Ltd

Ymddiriedolaeth Archaeolegol Gwynedd Cyf

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THE SNOWDONIA NATIONAL PARK

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for Gwynedd Archaeological Trust 1992

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## INTRODUCTION

This report discusses the results of an archaeological survey funded by Cadw: Welsh Historic Monuments, of all active and potentially active mineral extraction sites in Gwynedd, within the Snowdonia National Park. A similar survey, carried out in 1991, concentrated on extraction sites outside the Snowdonia National Park (GAT 26 'Minerals: An Archaeological Assessment'.)

As with the 1991 project, the work involved assessing the consequences of existing and proposed planning permissions of the mineral extraction areas upon known archaeological sites, as well as possible new sites found during the survey.

A total of 20 extraction sites were inspected as part of the assessment. A further 15 sites were disregarded from the survey for three main reasons :

- (i) They are dormant sites unlikely to be extracted from in the future.
- (ii) Detailed information concerning planning permission extents for certain extraction sites is not available.
- (iii) Some of the extraction sites in the Llanrwst area have been subject to archaeological recording during land reclamation schemes run by the National Park and funded by the Welsh Development Agency. In particular, the mines at Cyffty, Hafna and Vale of Conwy (GAT 1992 forthcoming).

## Minerals 1991 Summary

Items of work arising out of the 1991 Minerals assessment included

- (i) Geophysical Assessment of the Seiont Brickworks site at Caernarfon (Mineral No. 40).
- (ii) Geophysical and Archaeological Assessment of the area west of the Graeanog Burnt Mound Excavation (GAT 35).
- (iii) Field Assessment of Penrhyndeudraeth / Minffordd Quarry (Mineral No. 86) following the extension of quarrying beyond the limit of planning permission.
- (iv) Llystyn Rapid Survey.

The results of these items of fieldwork will be reported separately, except for (iii) which is briefly detailed below (p2.)

## Acknowledgements

Funding from Cadw : Welsh Historic Monuments is gratefully acknowledged, as is the willing co-operation of both the Gwynedd County Council Planning Department, especially the minerals section under Mr. J. Gibbins, and the Snowdonia National Park.

## METHODS

Mapped information indicating the extent of planning permission for each extraction site was obtained from Gwynedd County Council's Planning Department. Gwynedd Archaeological Trust's Sites and Monument Record (SMR) was used to plot the location of known archaeological sites against the extraction areas. With this information, each mineral extraction

site was visited and inspected.

All land within the planning consent was examined for known or unrecorded archaeological features, especially those areas undisturbed and free from any mineral workings to date. Areas immediately beyond the limits of planning consent were also inspected in advance of any future planning applications. Dormant and previously worked areas were examined for their Industrial Archaeology potential.

## **GEOLOGY AND HISTORY**

Information concerning the geology, legalities and background history of mineral extraction in Gwynedd has already been extensively covered in the 1991 report, and is not repeated here.

## **GAZETTEER OF SITES WITH ARCHAEOLOGICAL POTENTIAL**

The gazetteer includes those extraction sites where archaeological remains (both Industrial and pre-Industrial) were recorded. A full list of all the extraction sites within the Snowdonia National Park is given on pages 6-7.

### **86. Minffordd, Penrhyndeudraeth : Granite**

The active Minffordd quarry was included in the 1991 survey and actually lies outside the limits of the Snowdonia National Park. During the 1991 visit it was noticed that the quarrying activity had extended beyond the area for which consent has been granted, at the extreme north east corner of the site. Some 15 metres away from this north east encroachment, an overgrown rectangular ruin lay within a dense deciduous woodland.

As part of the 1992 survey, the north east area of the Minffordd quarry was re-examined, as was the rectangular structure. Despite substantial overgrowth, it was clear that the structure (approximately 10m x 5m) consisted of well faced stone walls on at least three sides, possibly indicating the remains of a Mediaeval or post Mediaeval building.

### **110. Rhiw Bach, Cwm Penmachno : Slate**

This large dormant quarry revealed no previously unrecorded archaeological sites, but did yield substantial Industrial surface structures, namely a large winding house and associated out-buildings, as well as the incline itself.

### **112. Moel Lus, Penmaenmawr : Igneous**

A vast area of consented land to the east of Penmaenmawr. The area encloses three recorded archaeological sites, none of which is immediately threatened. The area was examined as scrupulously as possible by one person, but such a large tract of land may require a more intense rapid survey in the near future.

### **113. Rhos, Capel Curig : Slate**

A dormant quarry containing the remains of Industrial workings, including an incline, slate built winding house and cottages.

### **118. Cwm Machno, Cwm Penmachno : Slate**

A large, presently dormant site containing extensive Industrial remains; winding house and incline especially remain in fairly good condition among substantial slate tips. No earlier archaeological remains were found at the quarry and no known sites were threatened.

**120. Croes Ddwy Afon, Ffestiniog : Slate**

No immediate archaeological potential, but a possible future expansion to the south of the quarry may result in the need for further investigation.

**121. Tonfannau, Tywyn : Igneous**

This active quarry has encroached upon and partly destroyed the Llechlwyd promontory fort (PRN 1777, RCAM Meirioneth Inventory 1921 p.131) at the southern base of Tal Y Garreg. The north east limit of the area with consent near the summit of Tal Y Garreg cuts across another fort - Tal Y Garreg, (PRN 1778, RCAM 1921 p.131, and Bowen and Gresham 1967 p.167). To date, actual quarrying has not reached this area, but falls approximately 10m short of the south west side of the fort. Pending possible destruction of the fort by the quarry, the monument urgently needs an archaeological assessment.

**126. Rhosydd, Croesor : Slate**

Part of a complex of dormant quarry sites containing extensive Industrial remains, namely substantial lengths of incline and dormant working houses. There are no threats to existing archaeological sites. No additional archaeological sites were found in the area.

**133. Capel Eden, nr. Trawsfynydd : Igneous**

A consented site showing no traces of actual working. A possible small semi-circular stone feature was found towards the north west side of the consent area.

**140. Cwt Y Bugail, Cwm Penmachno : Slate**

Located near Rhiw Bach quarry, Cwt Y Bugail contains a small amount of surface Industrial building remains within a vast deposit of slate tip. No earlier archaeological sites are threatened and no additional sites were found in the vicinity.

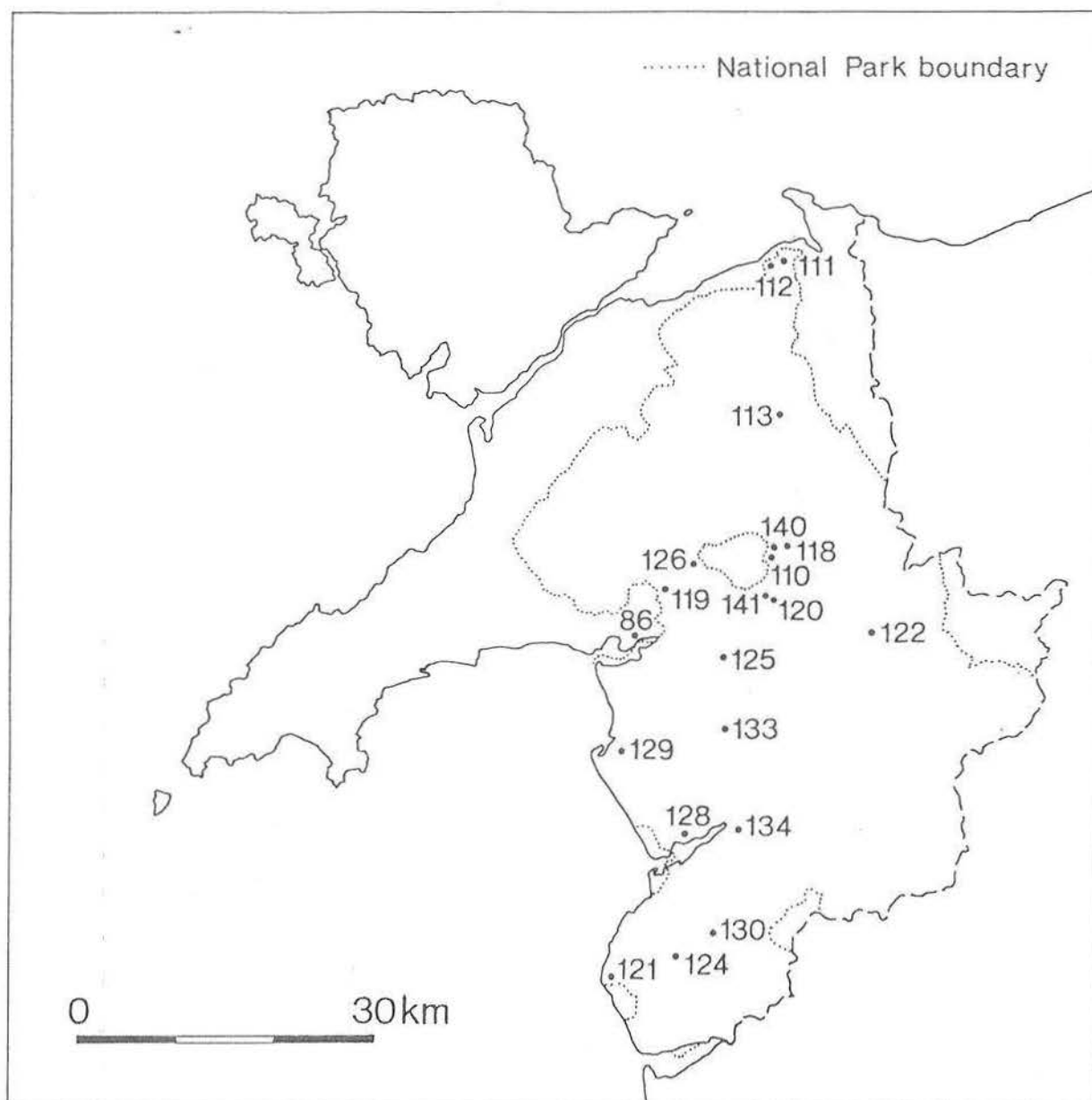


Fig. 1 General Location of Surveyed Extraction Sites



## RECOMMENDATIONS

### Minerals Planning

These recommendations are as outlined in the 1991 report under the same heading.

### Archaeology

The following extraction sites are identified by the Trust's survey as areas where further archaeological response may be necessary.

#### (i) Pre-Industrial Sites

(86) Minffordd - The rectangular structure found to the north east of the extraction area needs to be surveyed / assessed urgently given the close proximity of the quarry workings.

(112) Moel Lus - This vast tract of consented land requires a more detailed survey than was managed in a limited amount of time during this particular project. The Graiglwyd Neolithic Axe factory complex lies partly within this area and part of the consented area will be examined more thoroughly as part of the Trust's forthcoming Graiglwyd project agreed with Cadw.

(120) Croes Ddwy Afon - No archaeological remains were found here, but a more detailed survey may be required towards the south east of the extraction area, which may be the targeted area of quarrying in the long term.

(121) Tonfannau - Extraction work at Tonfannau has already extensively destroyed the remains of Llechlwyd promontory fort. Tal Y Garreg fort also lies partly within the consent area, and extraction work lies perilously close to the south west edge of the monument. An assessment or survey work urgently needs to be carried out at the site to prevent the imminent destruction of the fort.

(133) Capel Eden - A small semi-circular stone feature at this un-worked site may need to be recorded.

#### (ii) Industrial Sites

Sites (110) Rhiw Bach, (113) Rhos, (118) Cwm Machno, (126) Rhosydd and (140) Cwt Y Bugail contain Industrial remains which, although not apparently threatened, may need to be recorded by the Trust.

## INDEX OF SITES

(Trust's Official Mineral Number in Brackets)

Surveyed extraction sites of archaeological potential :

- (86) Minffordd, Penrhyndeudraeth.
- (110) Rhiw Bach, Cwm Penmachno.
- (112) Moel Lus, Penmaenmawr.
- (113) Rhos, Capel Curig.
- (118) Cwm Machno, Cwm Penmachno.
- (120) Croes Ddwy Afon, Ffestiniog.
- (121) Tonfannau, Tywyn.
- (126) Rhosydd, Croesor.
- (133) Capel Eden, Trawsfynydd.
- (140) Cwt Y Bugail, Cwm Penmachno.

Surveyed extraction sites of no archaeological potential :

- (111) Llys Gwynt, Dwygyfylchi.
- (119) Parc Y Pant Mawr, Croesor.
- (122) Arenig, Uwchmynydd.
- (124) Craig y Deryn, Dolgoch.
- (125) Craig Y Tan, Trawsfynydd.
- (128) Y Graig Wen, Abermaw.
- (129) Gloddfa, Llanbedr.
- (130) Coed Maes Y Pandy, Abergynolwyn.
- (134) Coed Ffridd Arw, Dolgellau.
- (141) Foel Gron, Ffestiniog.

Extraction sites disregarded from survey :

- (115) Pant Y Carw, Llanrwst.
- (116) Llanrwst Lead Mine, Llanrwst.
- (117) Tre Castell, Aberconwy.
- (127) Cymerau, Corris.
- (131) Coed Y Foel, Bala.
- (132) Aberddawn, Ardudwy.
- (135) Foel Ispri Isaf, Penmaenpool.
- (136) Bontddu, Penmaenpool.
- (137) Moel Ystradau, Ffestiniog.
- (138) Craig Gyfynwys, Trawsfynydd.
- (139) Garth Angharad, Arthog.
- (142) Nurse Gellidywyll, Ffestiniog.
- (143) Coed Gwydyr and Cae Coch, Llanrwst.
- (144) Braich Ddu, Trawsfynydd.
- (145) Aberllyn, Llanrwst.



Plate 1. Minffordd, Penrhyndeudraeth : view along north face of rectangular ruin

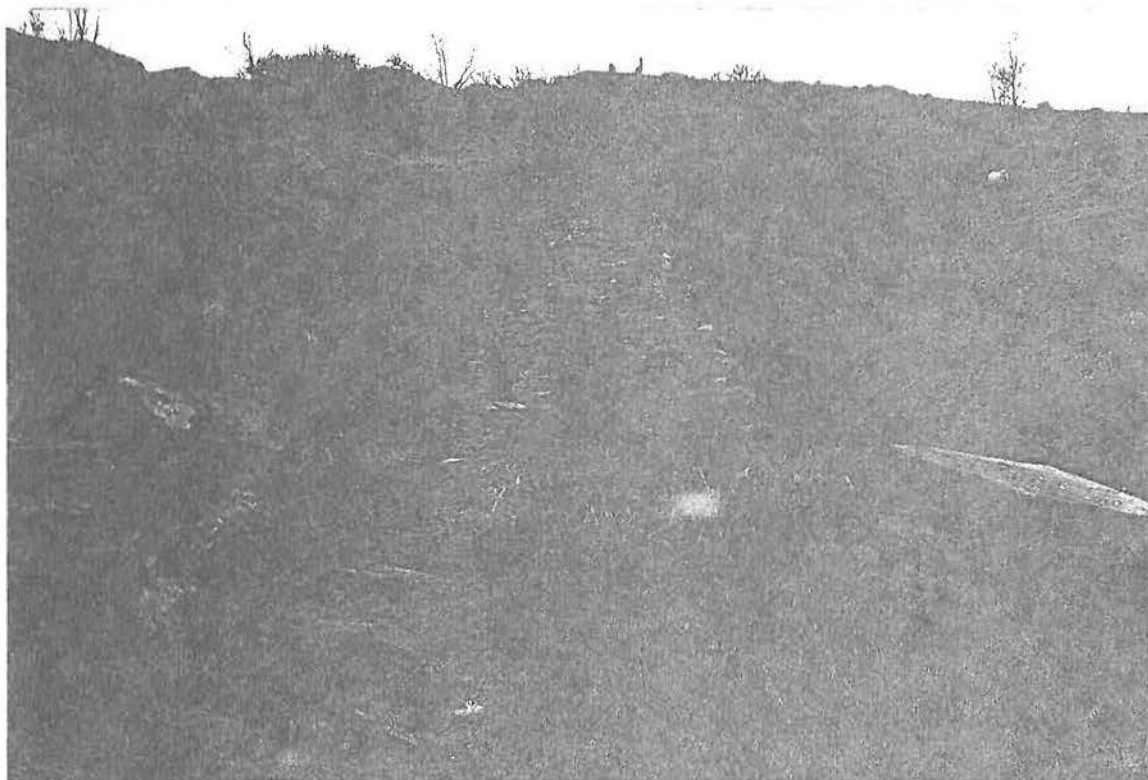


Plate 1. Minffordd, Penrhyndeudraeth : view along north face of rectangular ruin

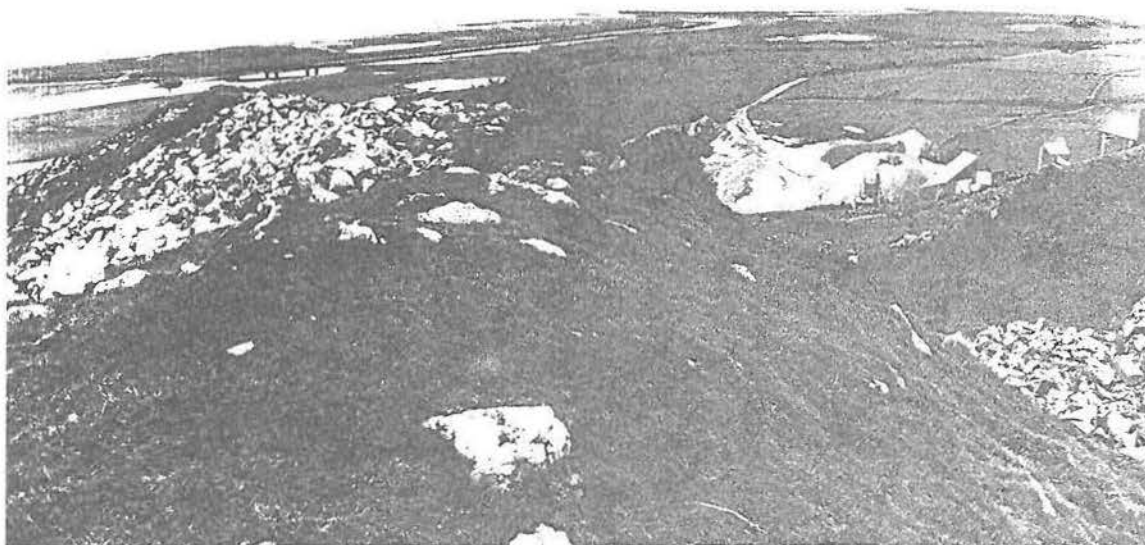


Plate 3. Tonfannau, Tywyn : Encroachment of quarry upon Llechlwyd promontory fort

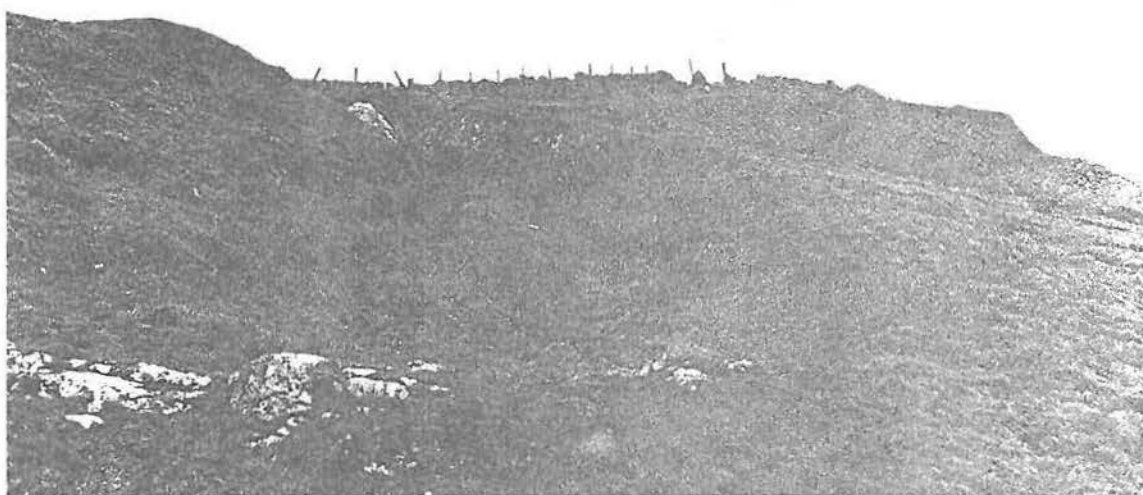


Plate 4. Tonfannau, Tywyn : Encroachment of quarry upon Tal Y Garreg promontory fort

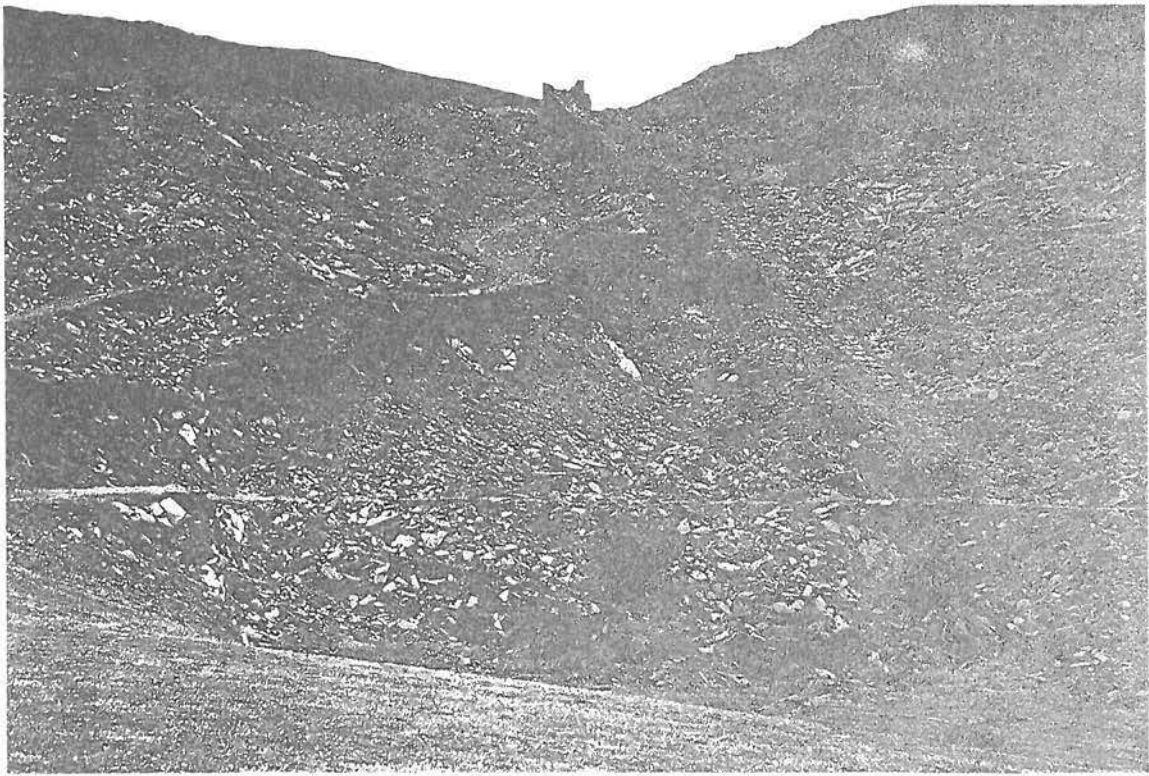


Plate 5. Cwm Machno, Cwm Penmachno : view of incline and winding house

