CARDIGANS. (I)

1" 127, 140

WWS(1848) = WW Smyth, Mem Geol Surv Vol II part 2, pp655-684 (1848)
Lodes numbered (x) from S→N.

OTJ (1922) = OT Jones, SRMRGB, Vol 20, (1922). Mine (x) on map

FJN(1962) = FJ North "Mining for Metals in Wales" (1962)
Nat Mus. Wales Cardiff

Francis(1874) A. Francis "The History of the Cardiganshire Mines from the earliest ages and the authenticated history to A.D. 1874". Aberystwyth.

HH Thomas MM(1909) 15 241 Detrital andalusite in sands

DC Daves (1888) = "A treatise on metalliferous mines & mining" 4th edition, London

GWH (1971) = G W Hall "Metal Mines of Southern Wales"

SL (1849) = Samuel Lewis "A Topographical Dictionary of Wales"

WD (1815) = Walter Davies "General View of the Agric. of S. Wales"

WJL (1967) = W J Lewis "Lead Mining in Wales" Univ. of Wales Press

J A Jones & N J M Moreton (1977) "The Mines & Minerals of Mid-Wales"

" J & M (1977) "

JRF-S (1979) J R Foster-Smith "The Mines of Cardiganshire" British Mining 12 mm. Northern Mine Research Society

WJH (1959) In "The future of non-ferrous mining in Gt Brit & Ireland" W J Hughes

TMT (1961) T M Thomas. "The mineral wealth of Wales & its exploitn" Oliver & Boyd.

DEB D E Brick "The Old Metal Mines of Mid Wales" Parts 1-3. Part 1 (1974), Second Ed (1976) Part 2, (1975); Part 3 (1976)

CARDIGANS (II)

SJS Hughes (1981) "The Cwmystwyth mines" British Mining 17, Northern Mine Research Soc.

N-F(1959) = WJ Hughes "The non-ferrous mining possibilities of Central Wales" in "The Future of Non-fer. Mining in GB e Ire" Inst Min Met.

MJ = Mining Journal - (quoted much by JRF-S)

GSCW(1974) Geol Surv Map "Cent Wales Mining Field" 1:100 000 (1974).

RD Morgan "The Metallif Mines of Wales" (Obt. from NM Wales, Card)

Agardite-(Y) Card.

Gwaith-yr-Afon M 6983

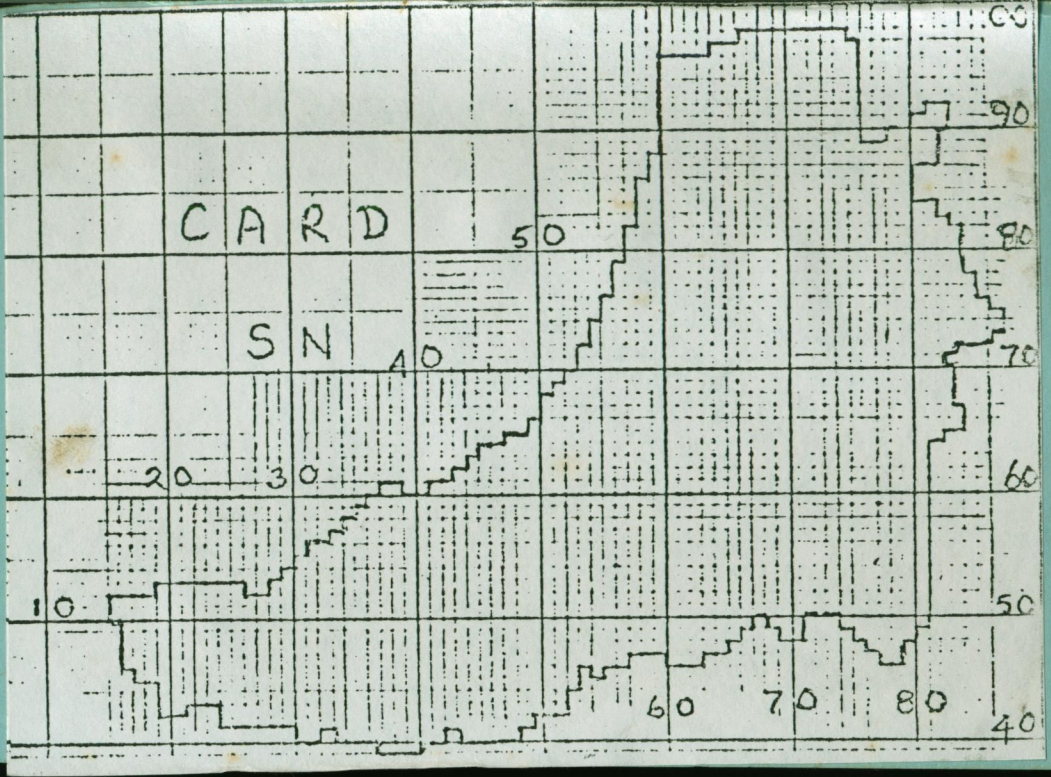
Rebike, Card

Brynyraft M SN 7458
Dorren M SN 6782
Castell M SN 7781

Andalusite

Card

Card SN


CARD
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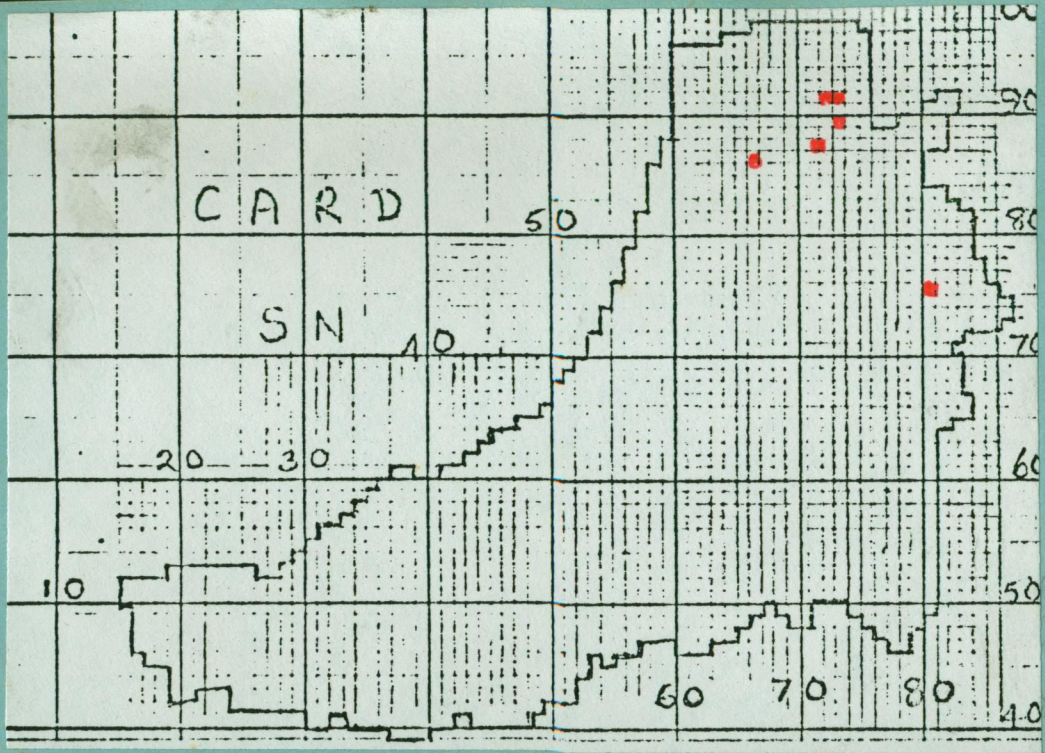
ANGLESITE CARD

Bwlch-Glas M SN 7187
Nantycagal M SN 7389
Cwm Ystwyth SN 8075
Esgair Hîr 7291, 7391
Mynydd Gorddu M66 86
Frongôch M SN 7174, 7274
Ren Rhiw M SN 7378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ANKERITE

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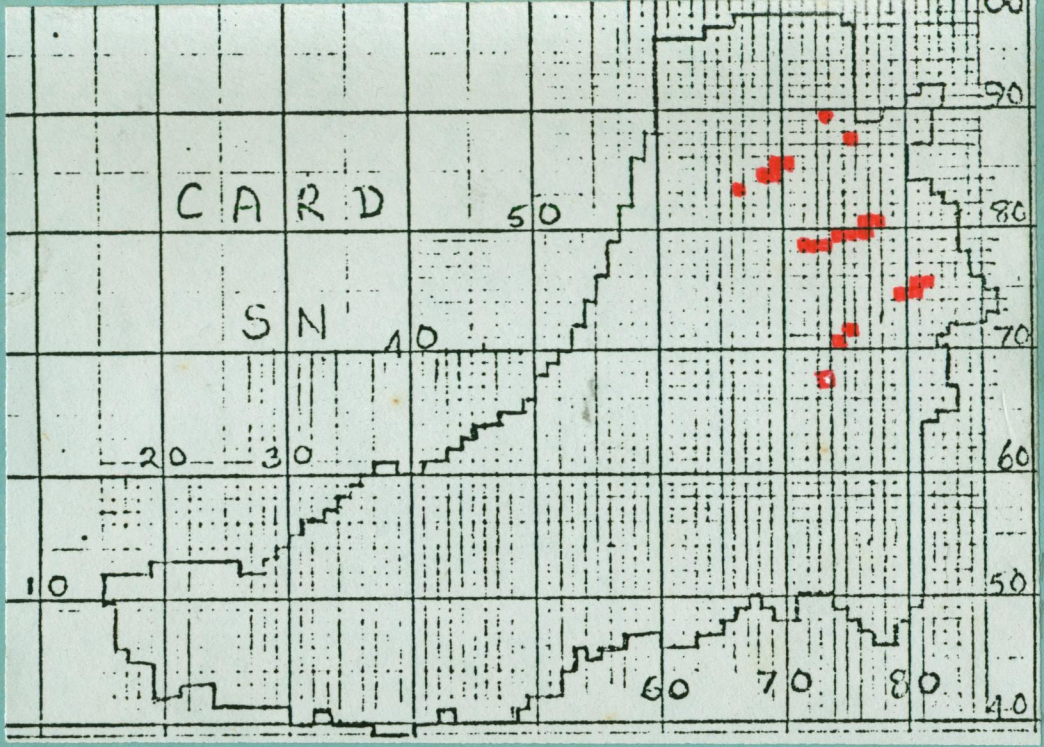
Cwm Maur M (?) 7367
Nant Eos M 7378
Bronfloyd M 6683
Camdrmaur M 7587
Castell M 7780
Llethyen M 6884 6984 6985
Llanwr-y-cwm 7085
Penrhiw M 7378
Temple M 7479
Tyn-y-ffordd 7579 7679 7680

CARD

Cacgynon M 7278
Rheidol Uld M 7178
Bwlchgwyn 7378
Cwm Ystwyth M 5 7974 8074 8075 8175
Nantycagal 7389
Gwaithyr Afon M (?)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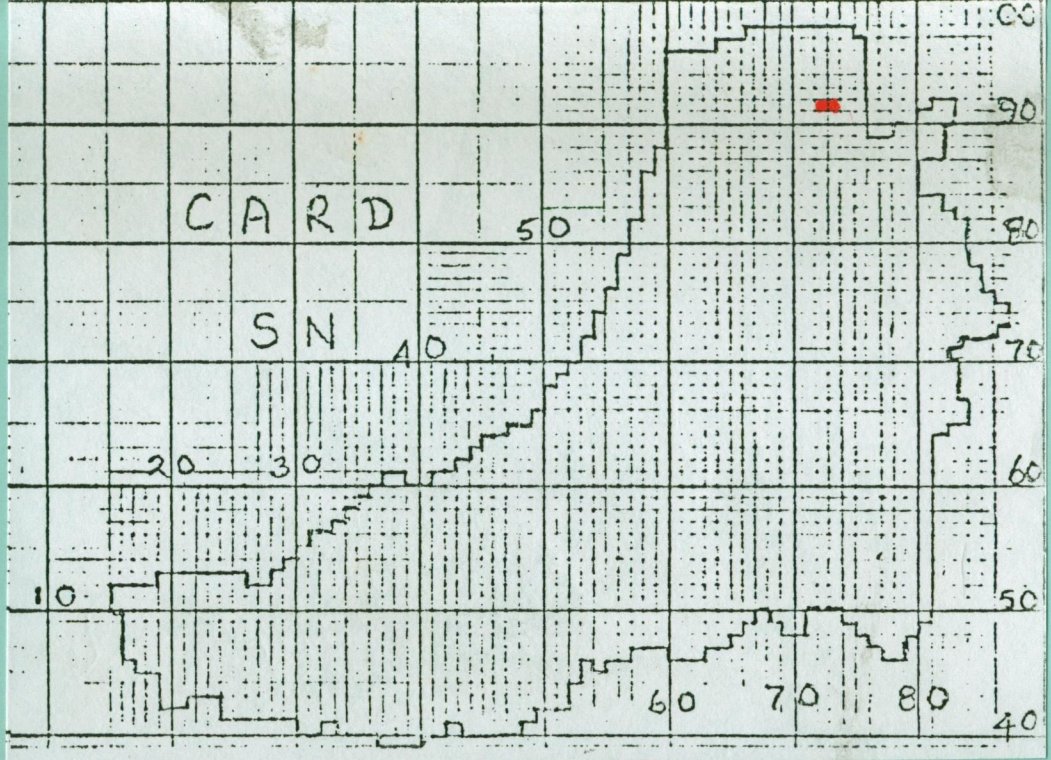
Aubenite Card

Hafan M
Gwaith-yr-Afon M ("ferroan dolomite") 69 83
Henfwich ("ferroan dolom")

Antigonte

Card

Esgair Hir 7291 7391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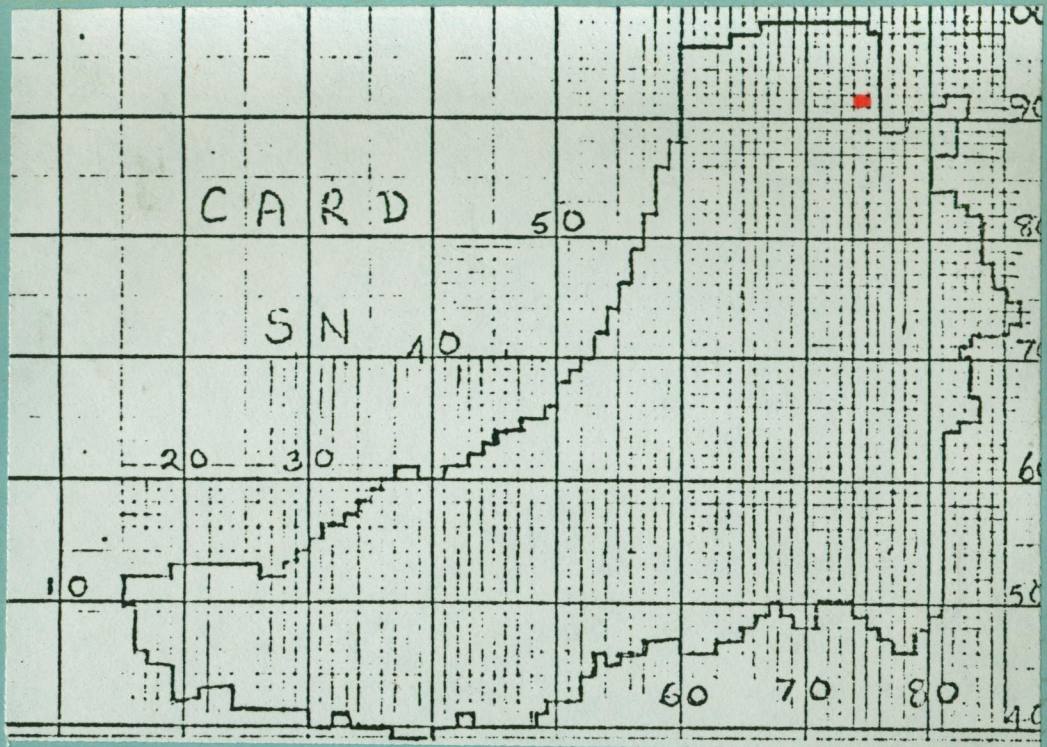
Apatite Card

Brynyrafft M SN 7487
Castell M SN 7781

ARAGONITE CARD

Esgair Vraith M 7491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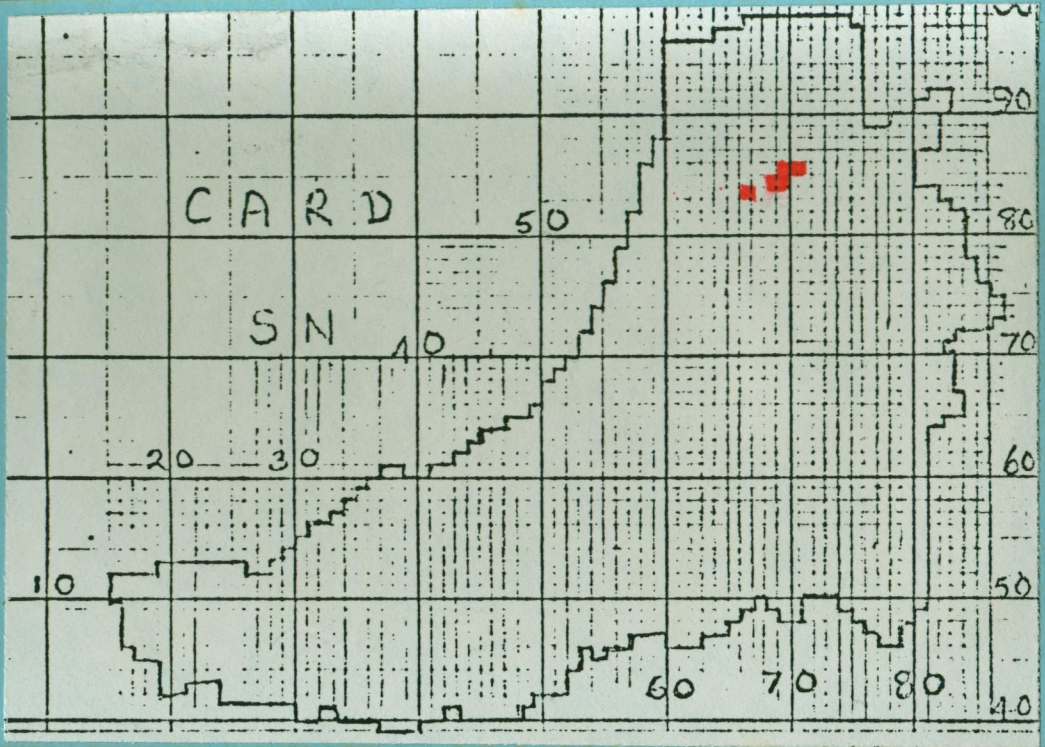
Arsenopyrite

Card.

Bronfloyd M 6683
Llanwr-y-cwm M 7085
Llethyken M 6884 6984 6985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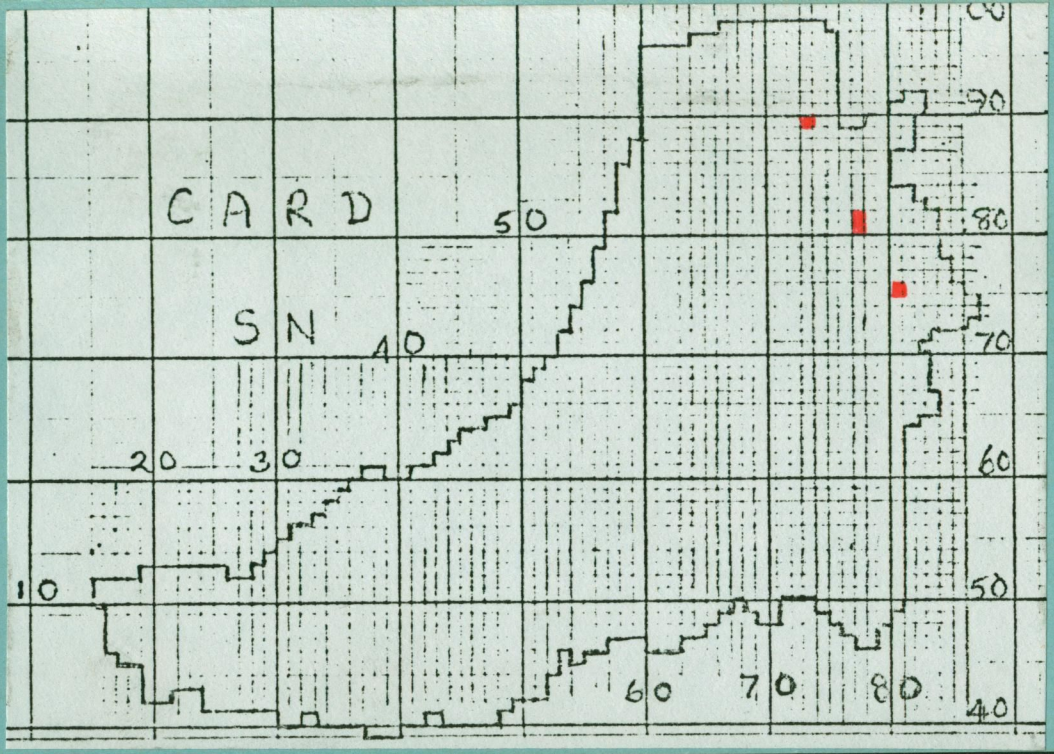
Cuprichalcite Card.

Cwm Ystwyth 8075
Nantycagal M 7389
Castell M 7780-7781
Hên Fwlch
Frongôch M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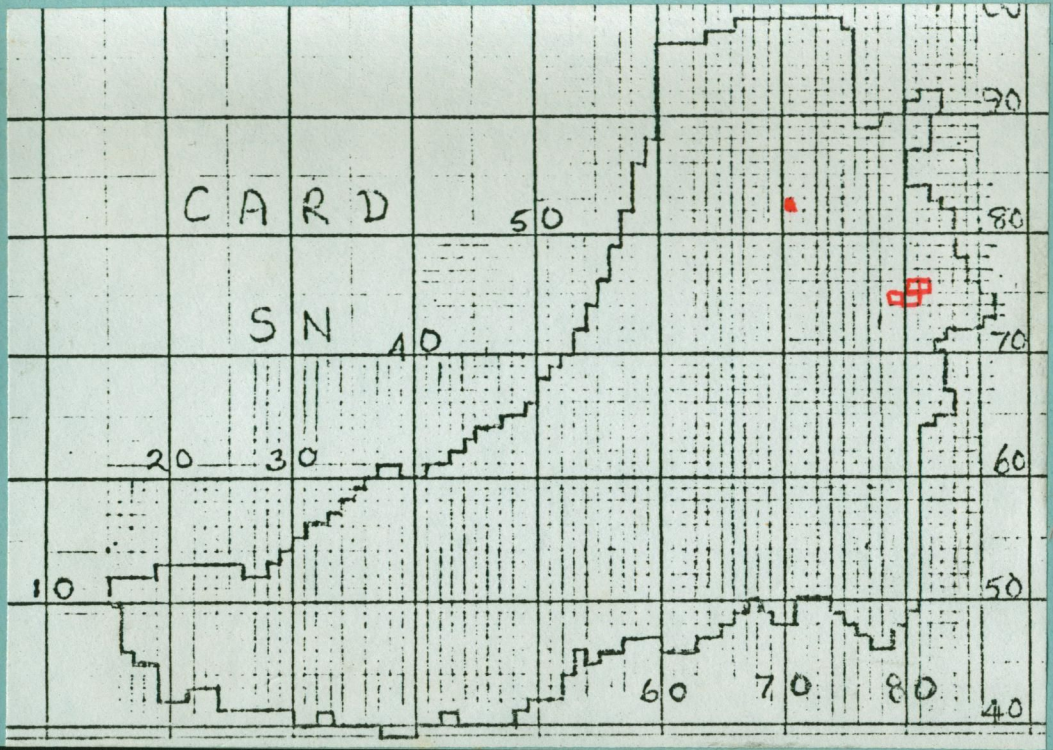
Azurite Card.

Cwm Ystwyth M's [? error for linarite?]
7974 8074 8075 8175

Biolch rhennaid M 7082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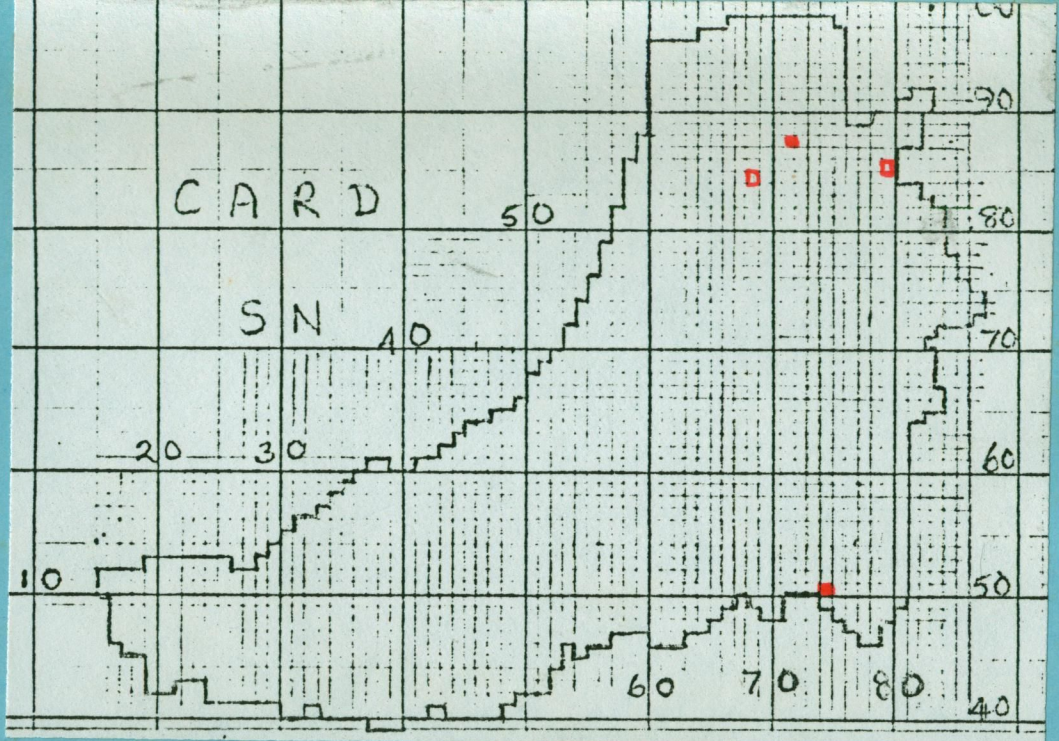
Baryte,

Card.

Bryn-Ambor M 7450
Llechwedd Helyg (?) 6884
Plynlimon M (?) 7985
Bwlch glas M. 7187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Bayldonite Card

Gwaith-yr-Afon M 6983

Bechererite Card

$(Zn,Cu)_6 Zn_2(OH)_{13}[(S,Si)(O_5OH)_4]_2$ {96M/4595}

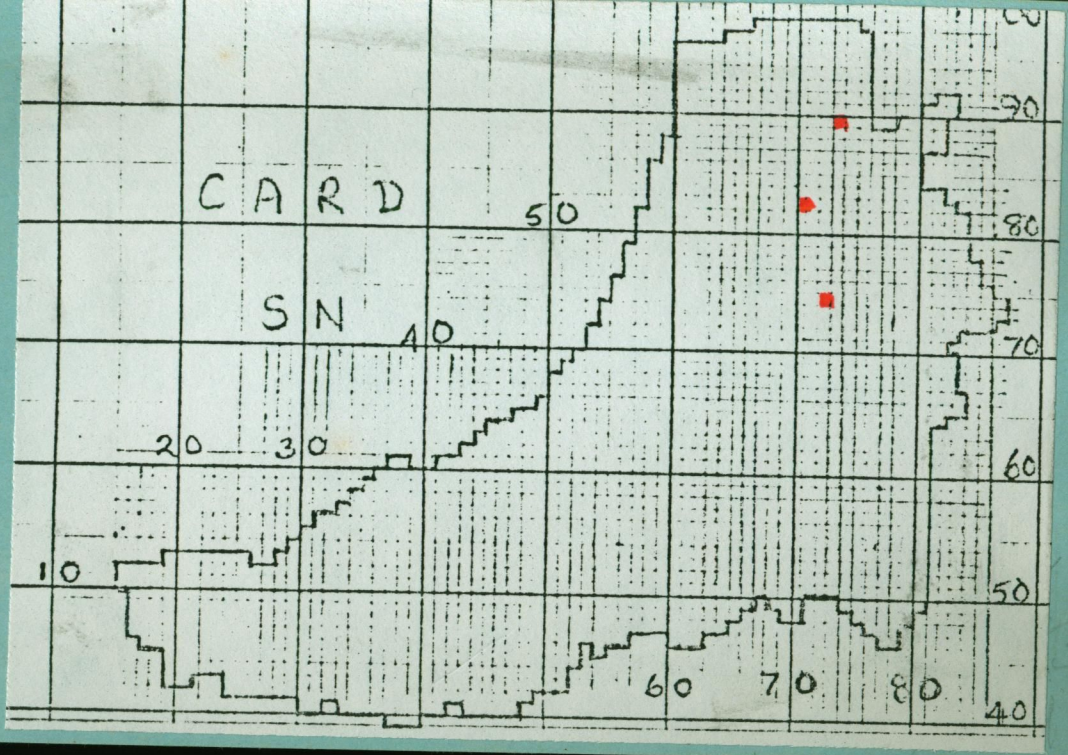
Foongock M 7274
Nanty cagal M 7389

BINDHEIMITE CARD

Fron-Goch M 72 74

Nantycagal 7389

Bwlchrhennard M 7082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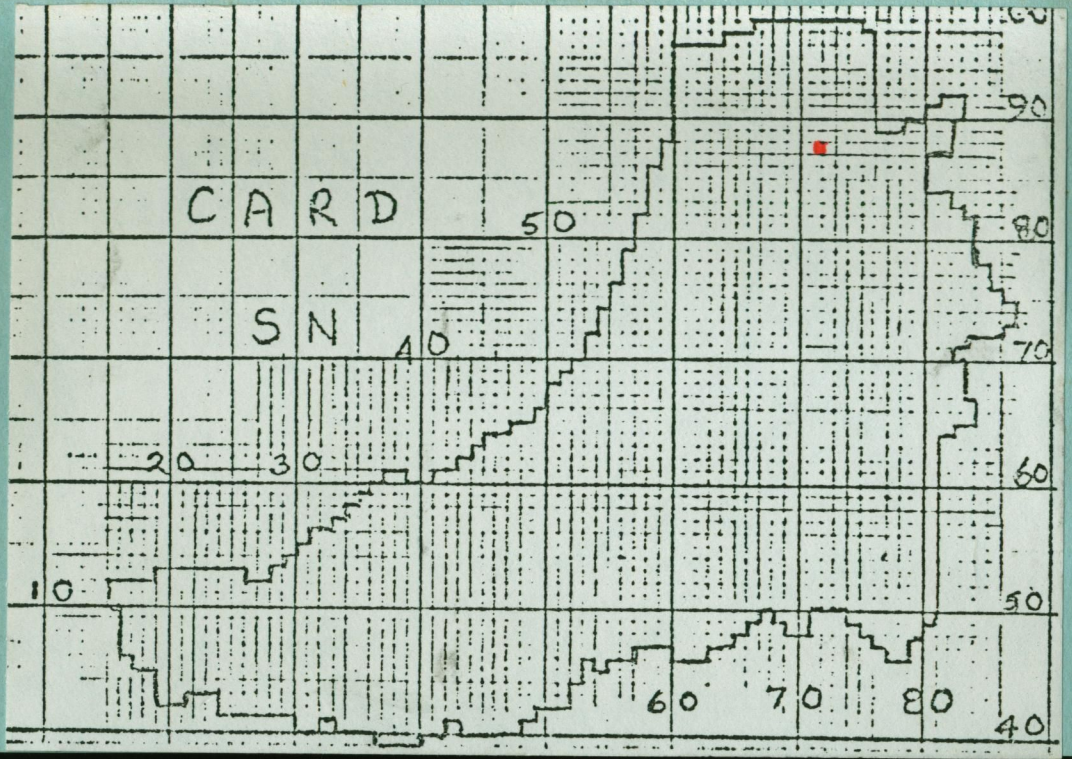
Bituminous Mins Card

Bolch-glas M. 7187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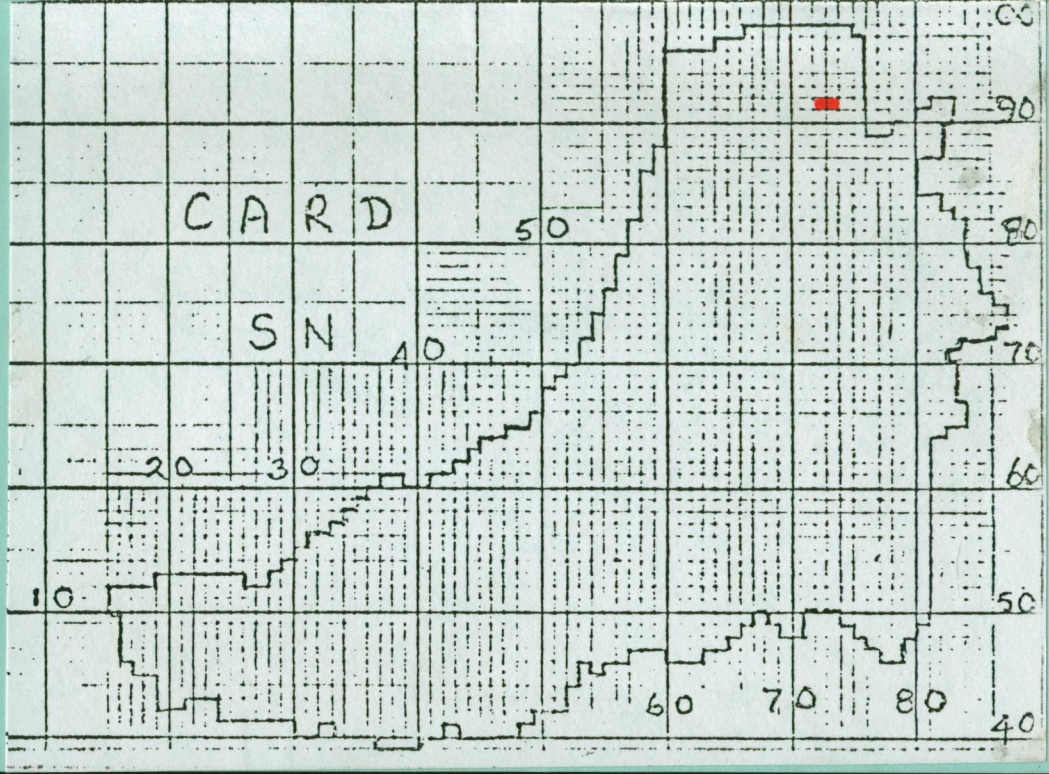
Bournonite Card

Esgair Hîr 7291, 7391
Gwaith-yr-Afon M 6983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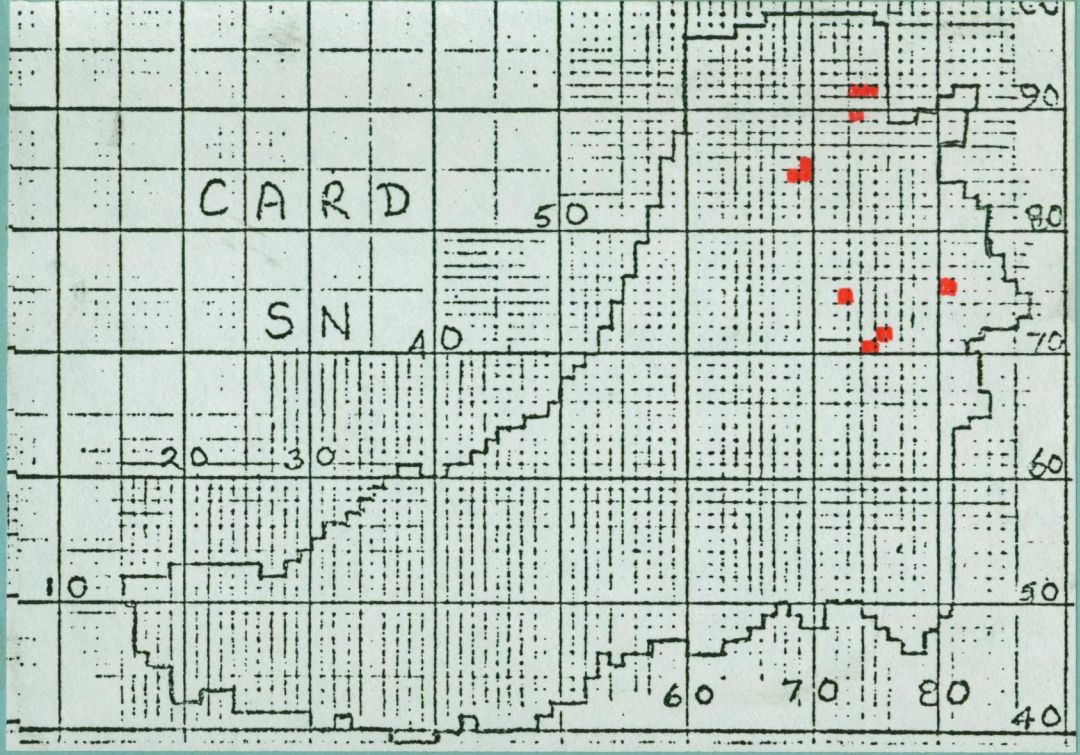
Brianyoungite, Card

Elgar M SN 6686
Frongoch M SN 7274

BROCHANTITE CARD

Esgair Hir 7391
Esgair Vraith 7491
Fron-Goch M 7274
Nantycagal M 7389
Glôg Fach, G. Fawr 7470 7571
Llethyhen M 6884 6984 6985
Cwm Ystwyth 8075
Fen Rhiw M
Gwaith-yr-Afon M 6993
Lodge Park Trial 6693 (?)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CALCITE (I)

Bwlch-Glas M 7187
Castell M 7780
Cefn Gwyn 6786
~~Copa Mine~~ Brignant 7475
~~Dolwen M~~
Esgair Llu 7982
Esgair Hir 7291 7391
Esgair Vraith 7491
~~Estymteon~~
Glog Ms Fach, G. Fawr 7470 7571
~~Gt W Van M~~ Caron 7265
Hafan M 7388
Henfwlch M 7388
Lisburne Ms 7771
Log-y-Las M 7471
Leri M 6788
E. Frongoch 7374

CARD

Loveden M 6694
Pont Rhyd-y-Groes 7474
~~Rugh's workings~~
Ty-Gwyn M 7777
Ystrad Einion M 7093
Ystumtuen Ms 7278 7378
Cwm Mawr M. 7367
Cwm Sebon M 6883
Cwm Erfin 6982
Grosswood 6672
Fron Goch M. 7274
Cwm Ystwyth 7974 8074 8075 8175
E. Rhydtalog M ("spar") 7952
Nantglas ("Spar") 7178

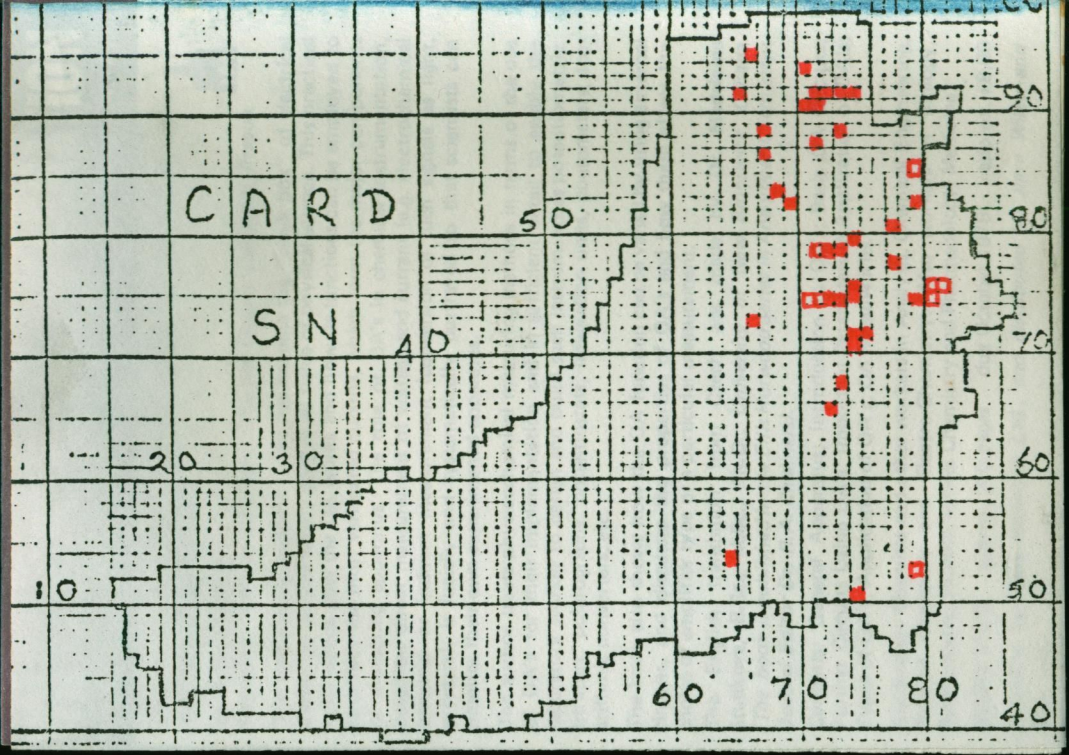
ca (I)

Bryn-Ambor M 7450
Pentre Trinant 6453
Temple M 7479
Blaenceulan M 7190
Dolclettwr M 6591
Plynlimon M (?) 7985
Nant Rhuddnant 77 77
Llechwedd-llwyd 7090
Frongoch W ("spar") 7074 7174
Gwaith-yr-Afon M

Ca (I)

Bryn-Ambor M 7450
Pentre Trinant 6453
Temple M 7479
Blaenceulan M 7190
Dolclettwr M 6591
Plynlimon M (?) 7985
Nant Rhuddnant 77 77
Llechwedd-llwyd 7090
Frongoch W ("spar") 7074 7174
Gwaith-yr-Afon M

Calcite (II) Card.


CARD
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Caledonite Cardigans.

Fron-goch M. 7274

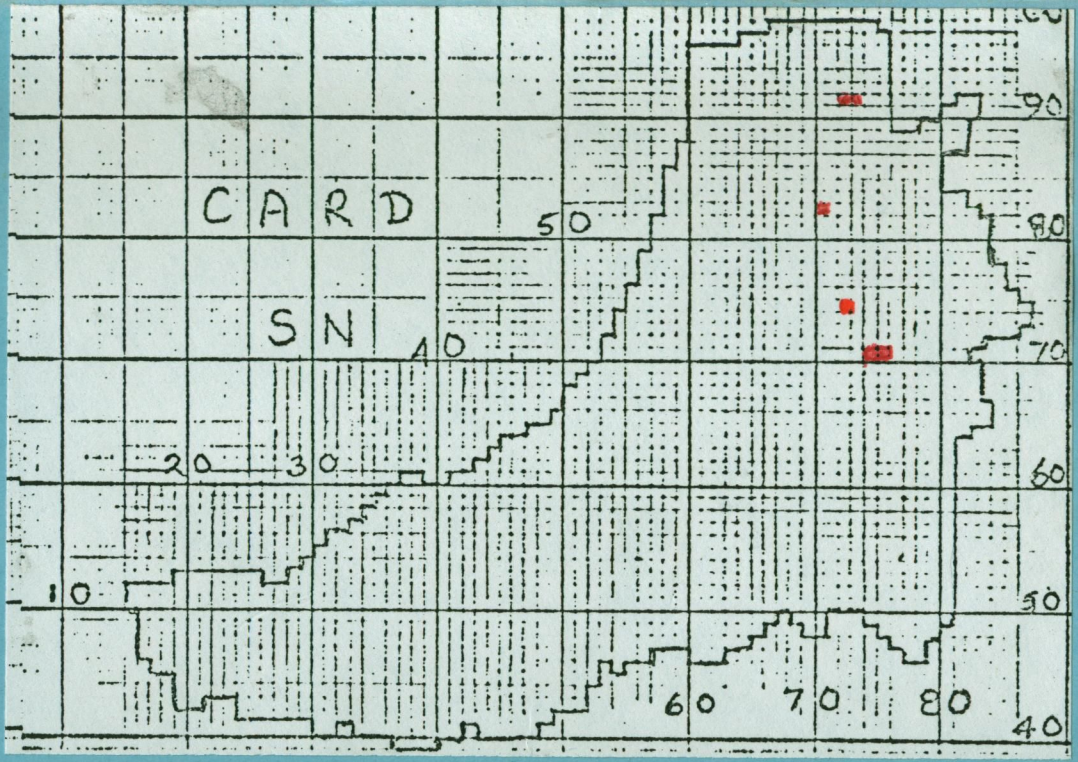
Esgair Hir 7291 7391

Bwlchrhennard 70 82

Glog Fawr 7470, 75 70

Nantycagal M

Bwlch Glas M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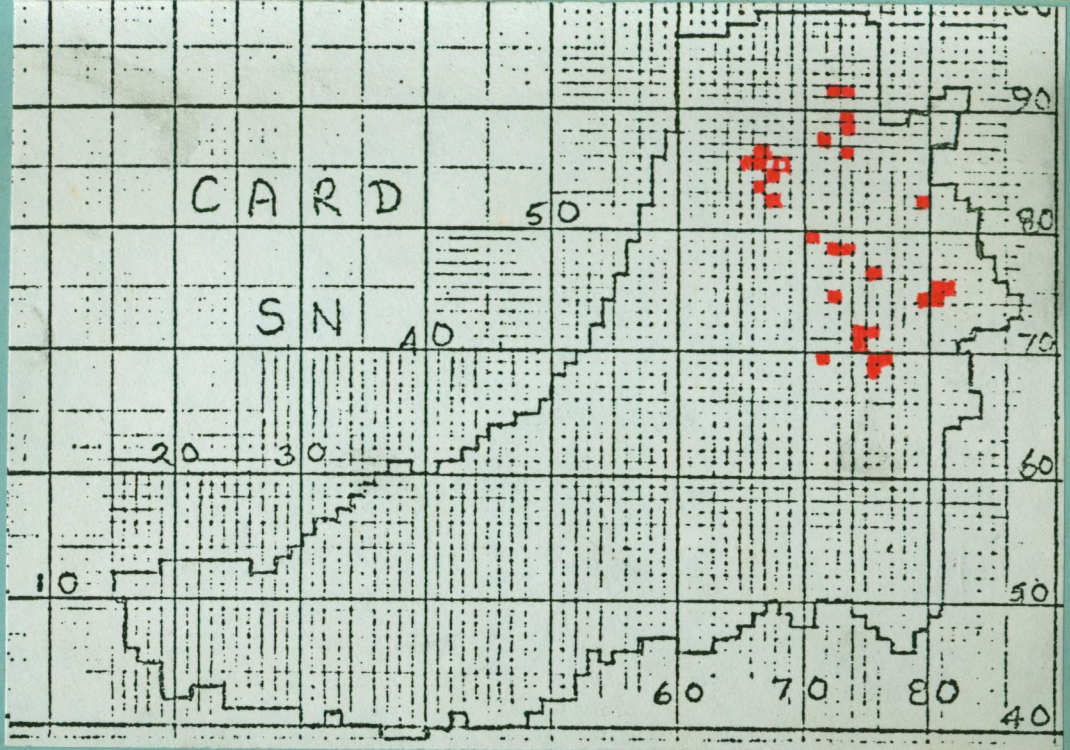
CERUSSITE (I) CARD

Bodcoll M 7576
Bwlch-Glas M 7187
Devils Bridge 7-7-
Esgair Llu 7982
Esgair Hir 7291 7391
Fron-Goch M 7274
Glog ~~Ms~~ Fach, Glog Fawr 7470 7571
Log-y-Las M 7471
Nantycagal M 7389
Pen-y-Cefn M 6585 6685
Ystumtuen Ms 7278 7378
Llettyhen M) 6884 6885 6985
Bronfloyd M 6683
Cwm Ystwyth M's 7974 8074 8075 8175
Llegwydd Helyg 6884

Bwlch y styllen 7386
Gelli'r Eirin 7079
Esgair Ddu 7669
Hên Fwlch 7388
E. Penycefn 6685
Hendrefelem 7169
Esgair Mwyn 7568, 7569
Hafan M 7388
Daren M 6782
Mynydd Gordu 6686
Bwlch Hennaid M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Cerussite (II) Card

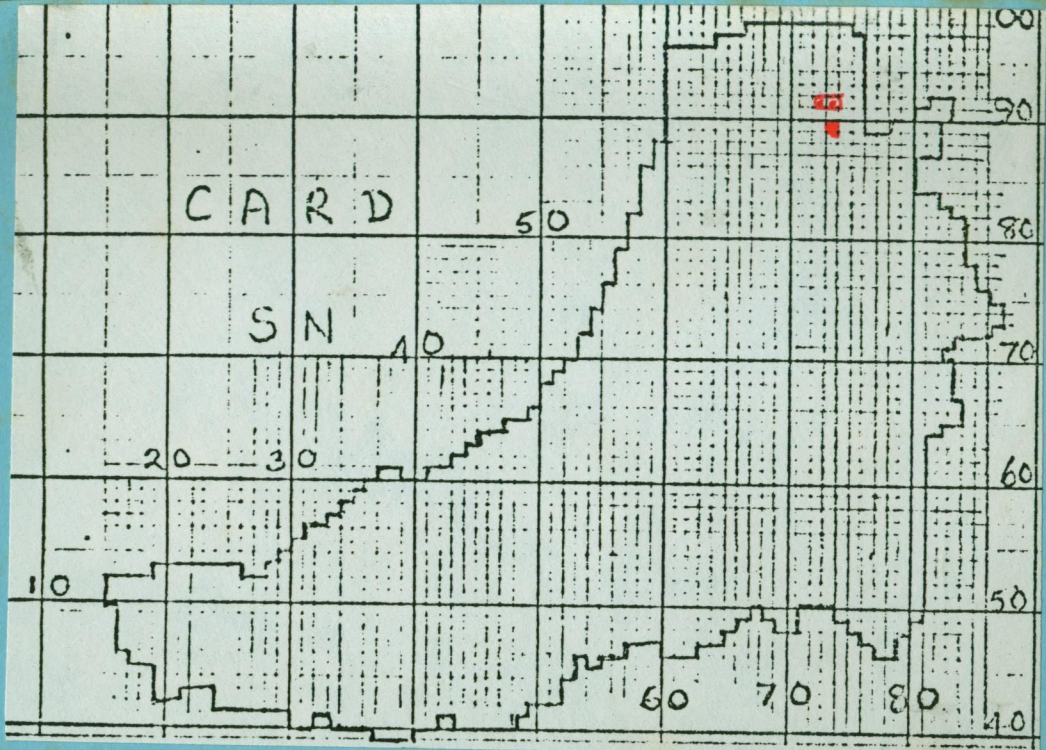
Pen Rhiw M

Cesàrolite Card

Nantycagal (1st Brit)
Llettyhen M.

Chalcocite Card

Nantycagal 7389
Esgair Hir 7291 7391 (?)
Frongôch M (?)
Dolwen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Chalcophanite Card.

Drosgol

Chalcophyllite Card.

Gwaith-yr-Afon M

CHALCOPYRITE (See also "COPPER ORE") CARD

Blaenceulan M 7190
Castell M 7780
Cefn Gwyn 6786
~~Copa Hill~~ Cwm Ystwyth Ms { 7974 8074 8075 8175
Cwm Sebon 6883
Dolclettwr M 6591
Dolwe n M
Esgair Llu 7982
Esgair Hir 7291 7391
Esgair Vraith 7491
~~Esgyrtaan~~
Fron-Goch M 7274
Glog Ms Fach, G. Fawr 7470 7571
Hafan M 7388
Henfwlch M 7388
Bwlchyglyllen 7386
New Bog M 6591

Leri M 6788
(Lisburne Ms) 7-7-
Llechwydd Helig 6884
Melyn-y-Lodge —(?)—
Nantycagal M 7389
~~Tre'r Ddol M~~
Ty Gwyn M 7777
Tyns Cynoelin M —(?)—
Ystrad Einion M 7093
Ystumtuen Ms 7278 7378
Cwm Erfin 6982
Cwm Carlol 6983
Bryn ~~—~~ Arian 6691
Tal y bont 6-9-
"Tal-i-essin" 6983?
Llethyhen M 6884 6885 6985

Cupy

Tyn-y-ffordd 7579 7679 7680

Temple M 7479

Penrhiw M 7378

Bwlchgwyn M 7378

Tynyfron M 7278

~~Hachwedd-elyg M 6884~~

Bronfloyd M 6683

Llanwr-y-cwm M 7085

Camdrinawr M 7587

Cwmdaren M 6883

Caegynon M 7278

Nant-y-creian W

Rheidol Utd. M 7178

Nant Rhuddnant 7777

Troed-rhiw-ruddwen 7747

Cwm Brefi 6954

E. Frongoth 7374

Nant Meirch 7781

Llechwedd-llwyd 7090

Esgair Mwyn 7568, 7569

Hendrefelen M 7169

Erglodd M

Gwaith-yr-Afon M

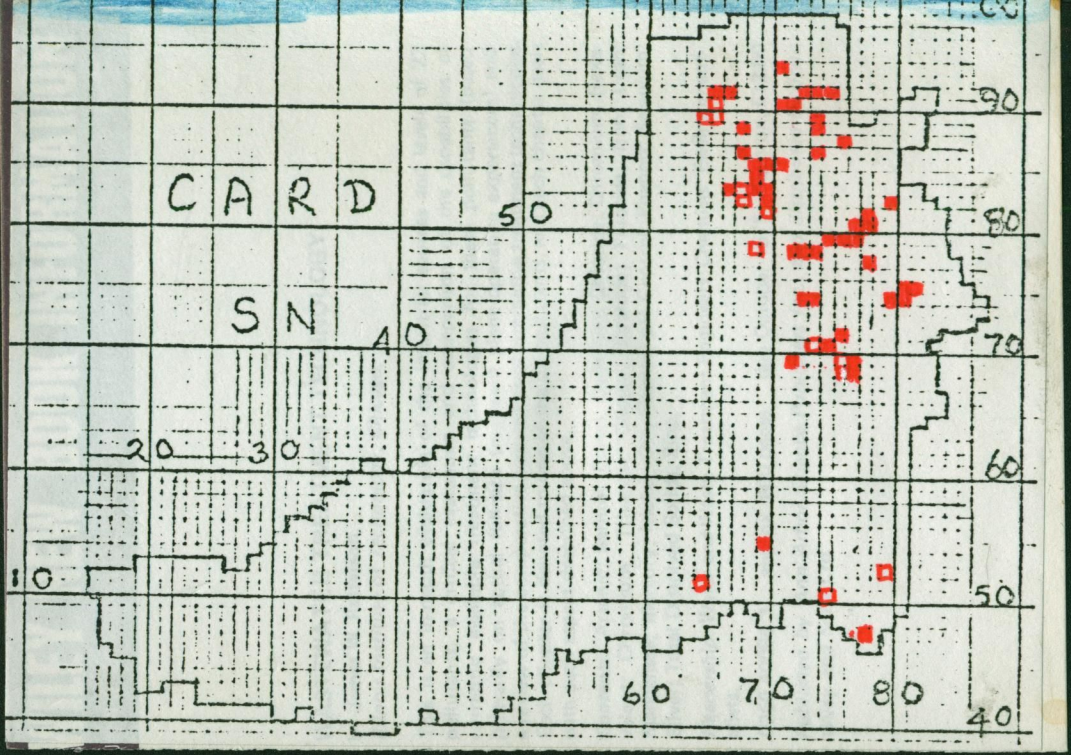
Pen Rhiw M 7378

Lodge Park Trial

Chalcopyrite ▨ Card

"Copper Ore" □

(?) = □


CARD
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"COPPER ORE" (Unspecified) CARD

Aber Ffrwyd 6878
Allt-y-Crib 6489 6589
Bron Caradoc 6-6-
~~Bronfloyd M~~
~~Camdwr Mawr M~~
~~Cwm Daren M~~
~~Cwm Erfin~~
Daren M 6782 6783
~~Esgairlle W M~~
Esgair Mwn Ms 7568 7569
~~Glog Fawr lode~~
Goginan M 6981
Penlanfach M 7370
Penpontbren M 6590
Pwll Roman M 6591
Daren E M 6983

~~Troed rhiw Ruddwen~~
Rhydtalog M 7952
Bryn-Ambor M 7450
~~Crom Brefi M 6954~~
Mynydd Bach M 6451(?)

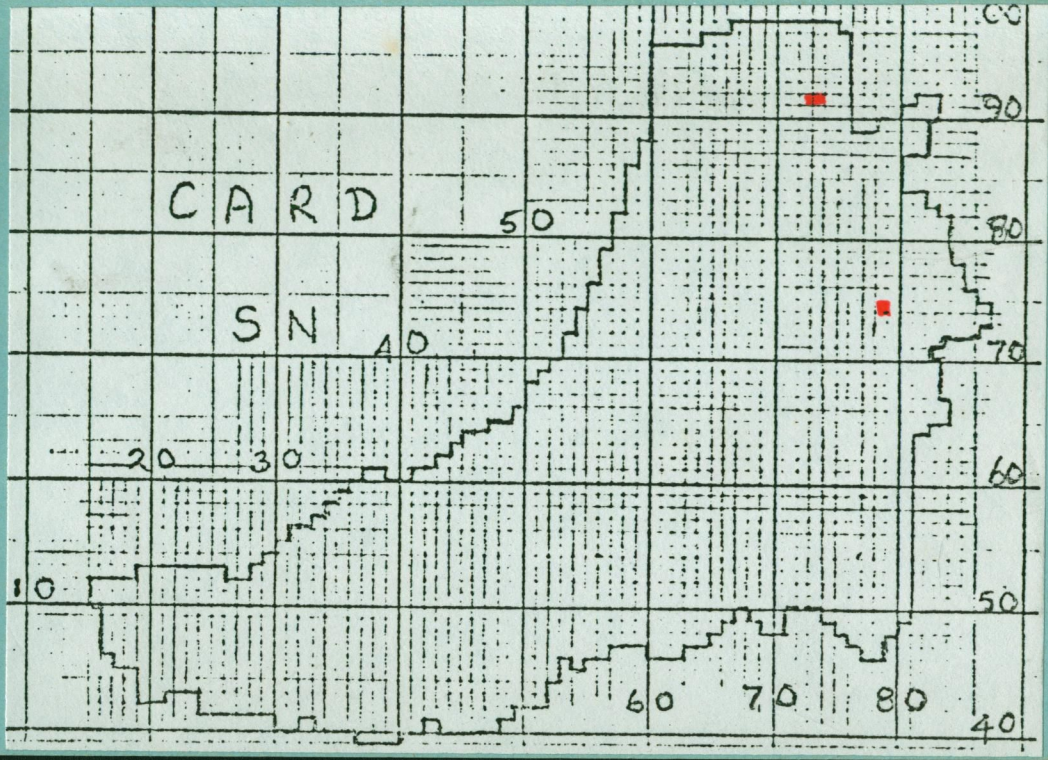
☐ On Cupy map

Chenite, Cardigs.

Llechwedd Helyg M.

" CHLORITE" (Unspecified) CARD

Cwm Ystwyth West M's. 7874
Esgair Hîr 7291 7391
Frongôch M.


CARD
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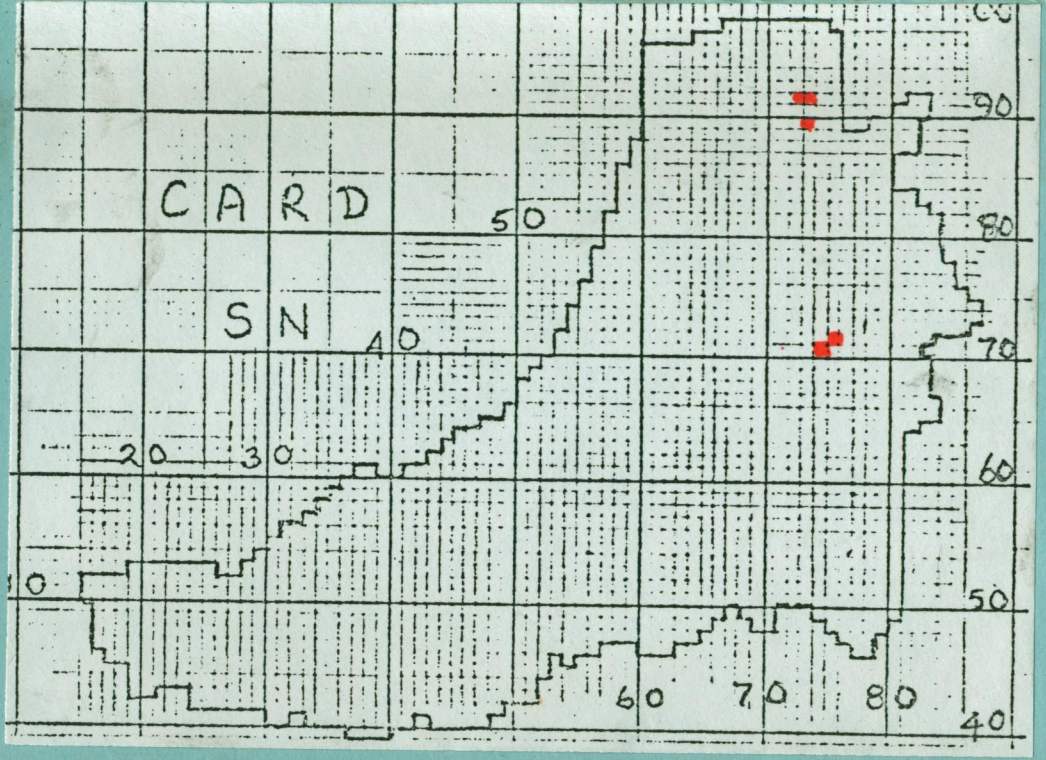
Chrysocolla

card

glôg Fach 7470
glôg Fawr 7571
Nantycagal 7389
Esgair Hir 7291, 7391
gwaith yr Afon M
Esgair Vraith
Frongôch M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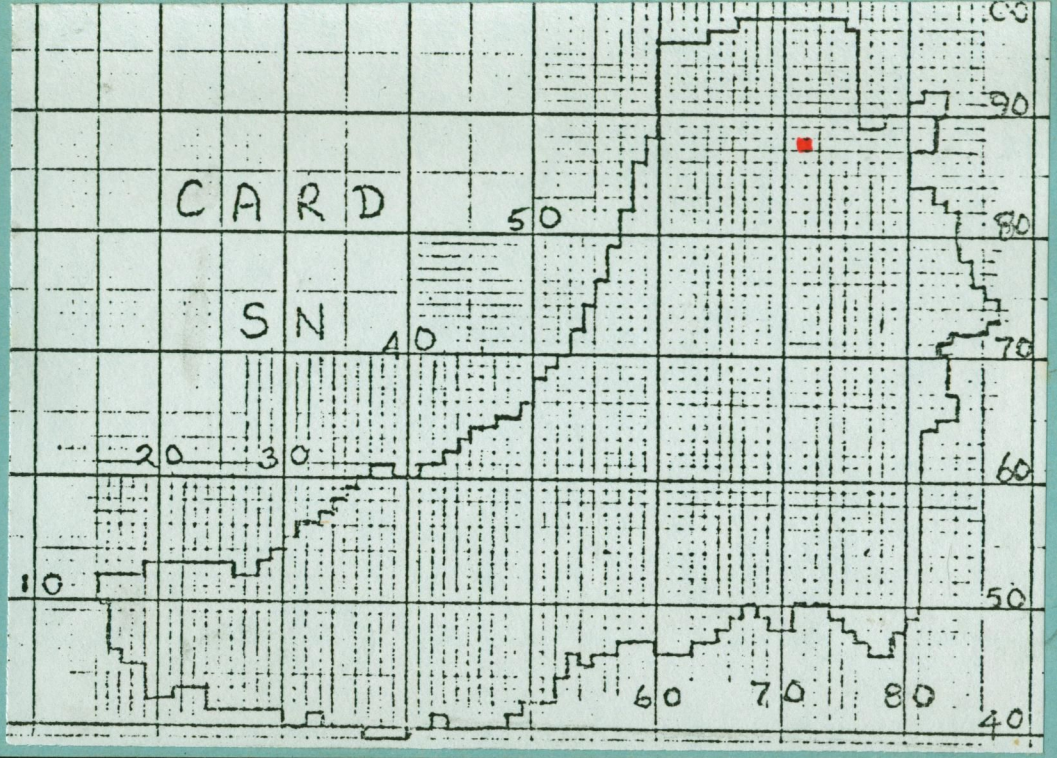
CINNABAR CARD

Bwlch-Glas M 7187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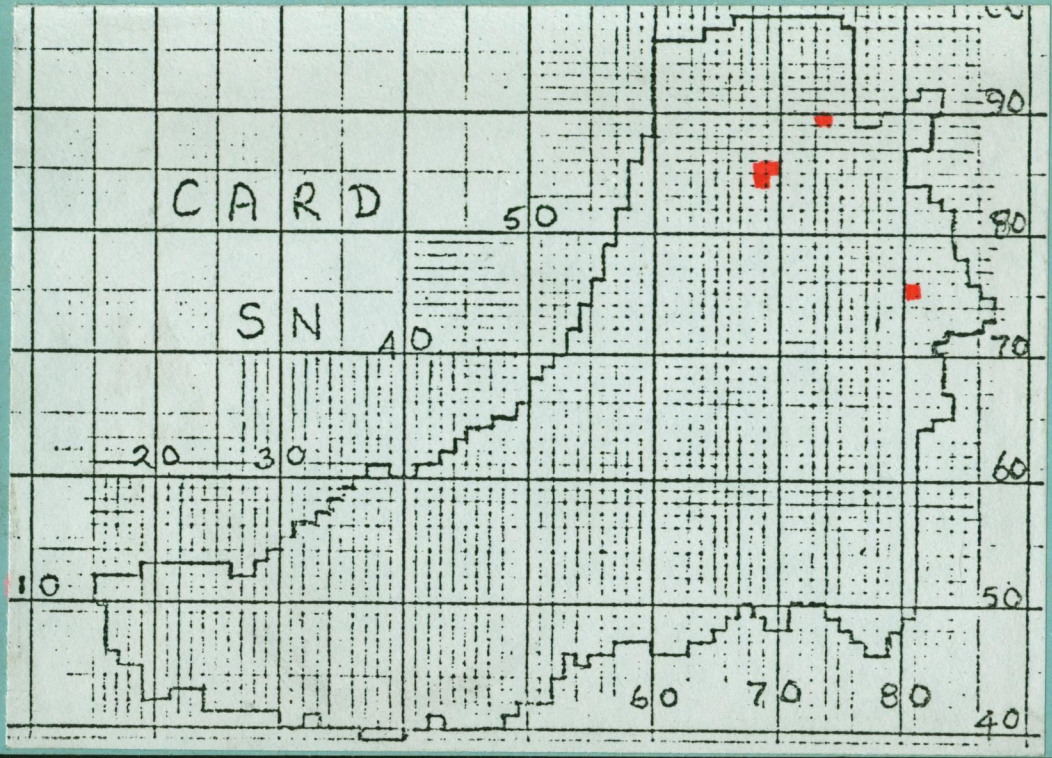
Connellite, Card.

Lodge Park trial
Gwaith-yr-Mon M

COPPER, NATIVE CARD

Nantycagal M 7389
Llettyhen M 6884 6885 6985
Cwm Ystwyth 8075
Gwaith-yr-Afon M
Frongoch M
Lodge Park Trial


CARD
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(Copper Sulphates, unident) Carol

Fron Goch M. ["broochantite"] 7274
Cwm Ystwyth [light green] 8075
Esgair Hir 7291 7391

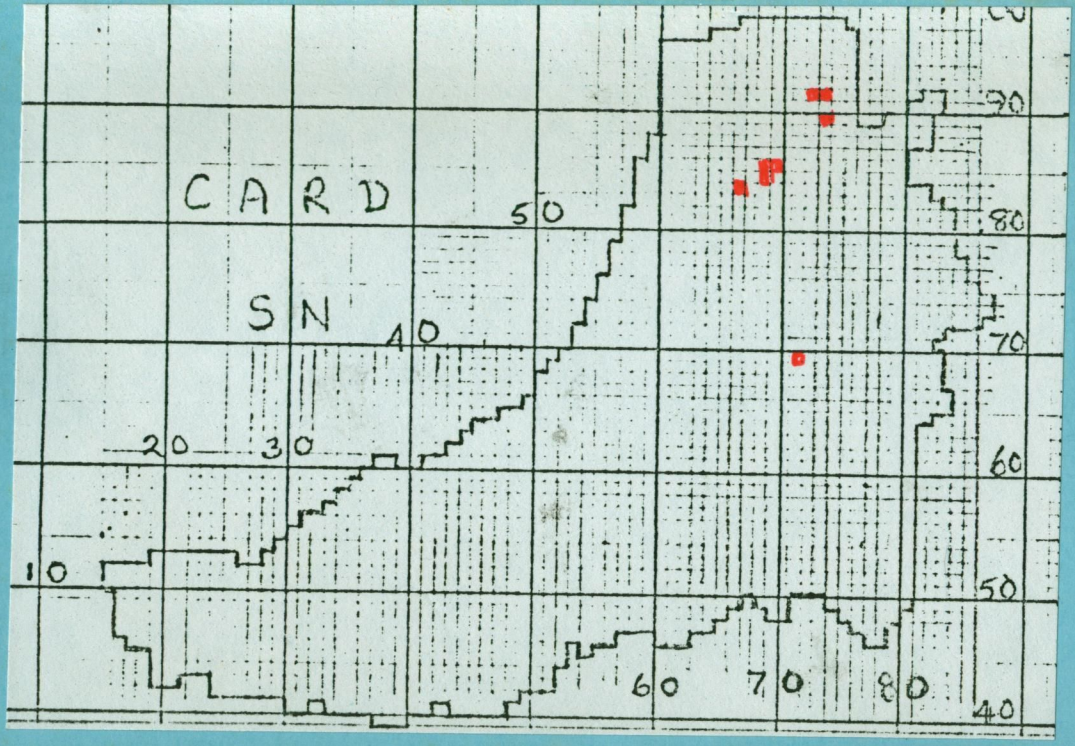
Coronadite Card.

Llettyhen M.

Covelline

Card.

Llethyken M 6884 6885 6985
Bronfloyd M 6683
Nantycagal M 7389
Esgair Hîr 7291, 7391
Hendrefelen 7169 [?]
Frongôch M
Rhiw Rhiw M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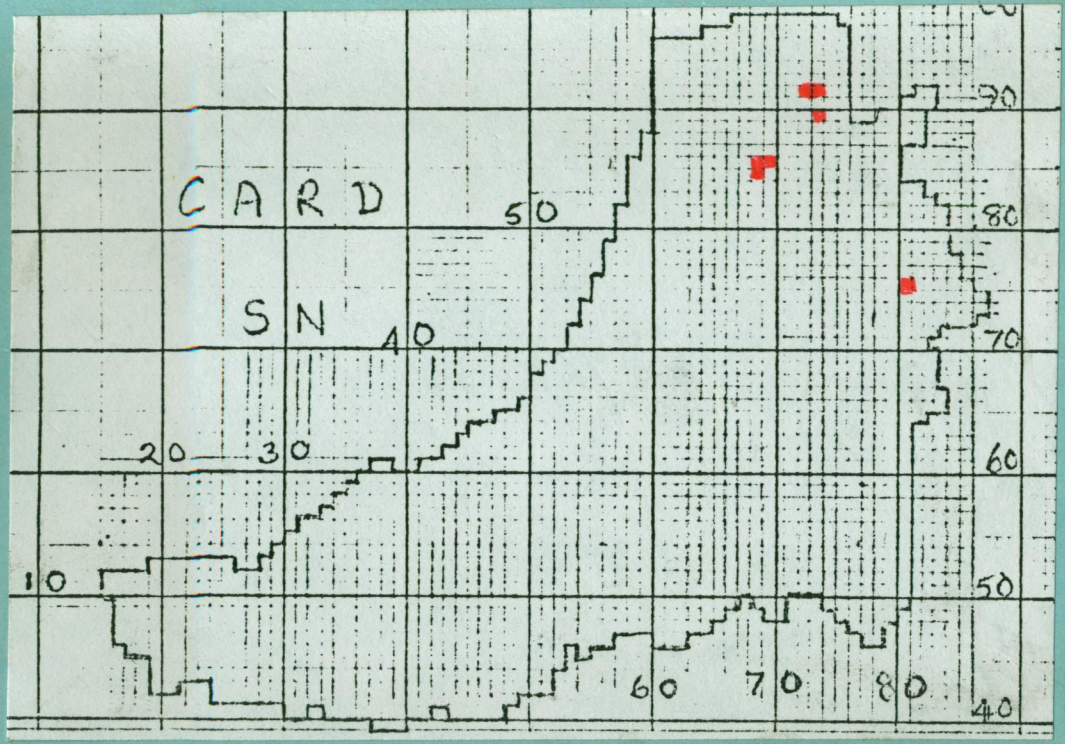
Cryptomelane Card.

Drosgol
Lleyhen

CUPRITE CARD

Nantycagal M 7389
Llethyhen M. 6884 6885 6985
Cwm Ystwyth 8075
Esgair Hir 7291, 7391
Gwaith-yr-Afon M
Lodge Park Mine
Frongôch M.
Rein Rhiw M
Dolwen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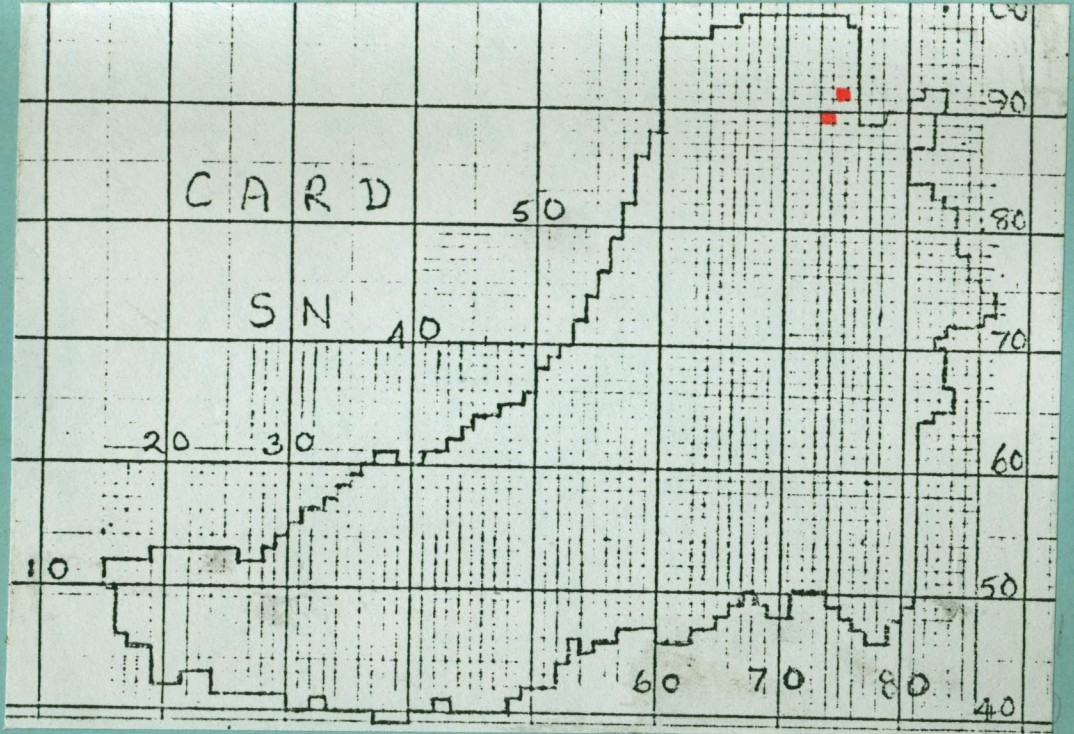
DEVILLINE

CARD

Nantycagal M 7389

Esgair Vraith M 7491

Gwaithyr Afon M. (?)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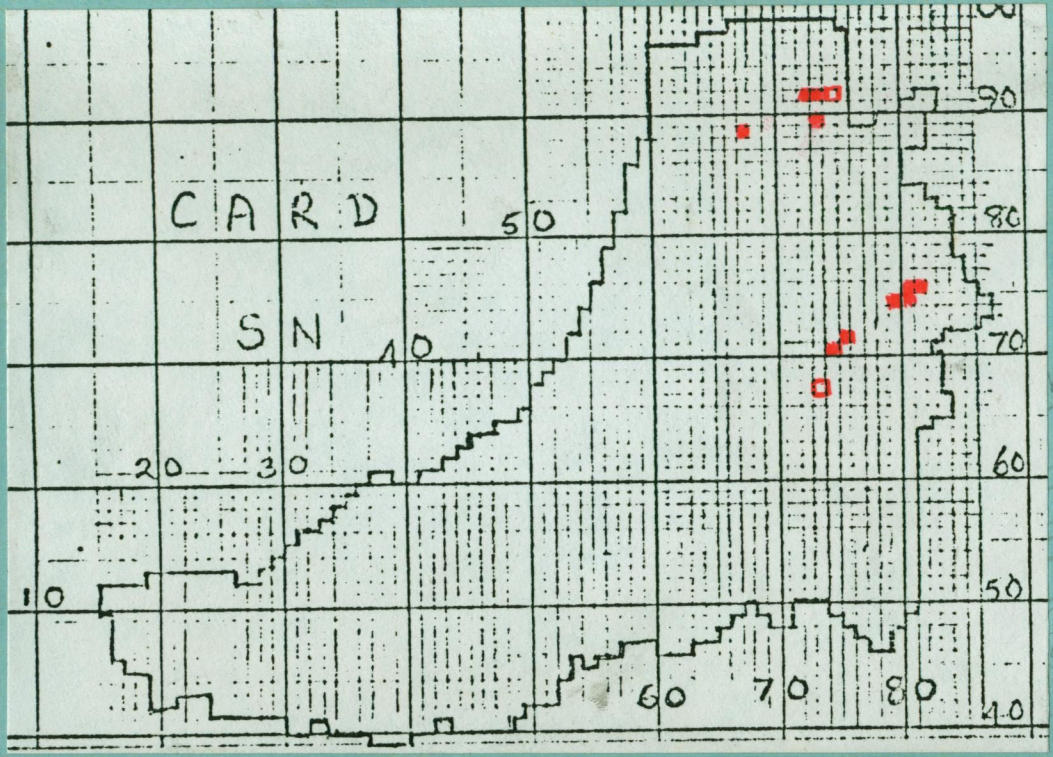
DOLOMITE CARD

~~Copa Hill~~
Glog ~~Ms~~ Fach 7470 7571 Henfwlch (Ferroan)
Leri M 6788
Nantycagal M 7389
Cwm Maior M(?) 7367
Esgair Vraith(?) 7491
Cwm Ystwyth 7974 8074 8075 8175
Esgair Hir 7291, 7391
Gwaith-yr-Afon M (Ferroan)
Frongoch M (?)
Hendre Q
Esgair Vraith. [?]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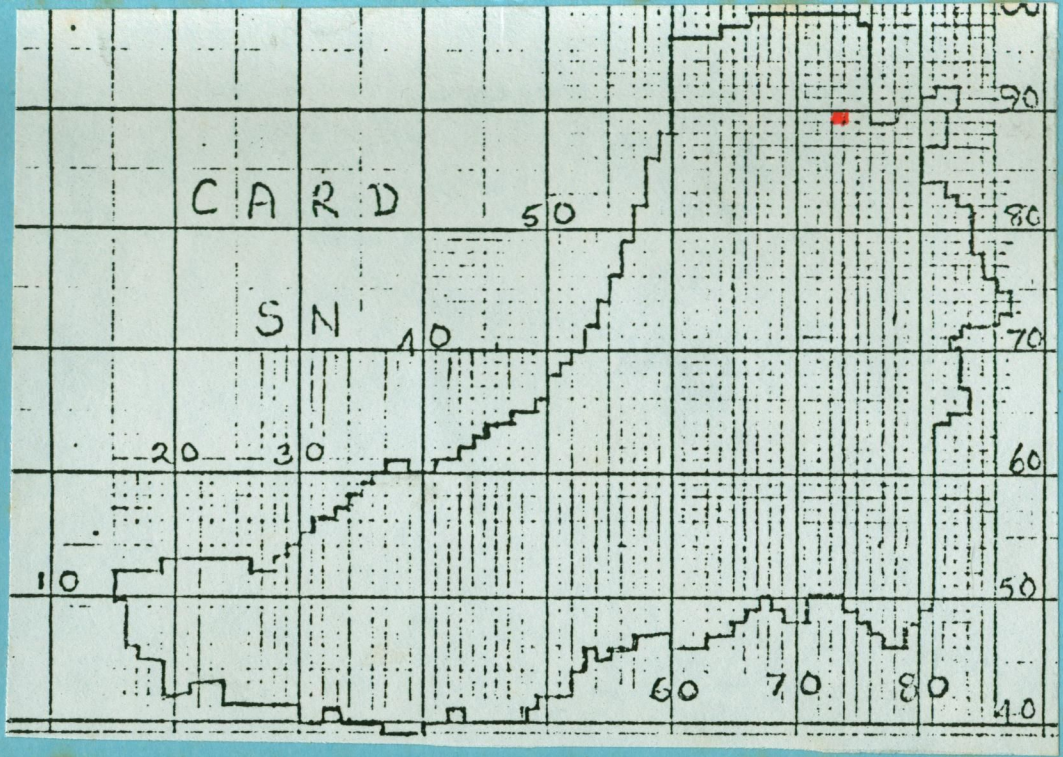
Dundasite Card

Nantycagal M 7389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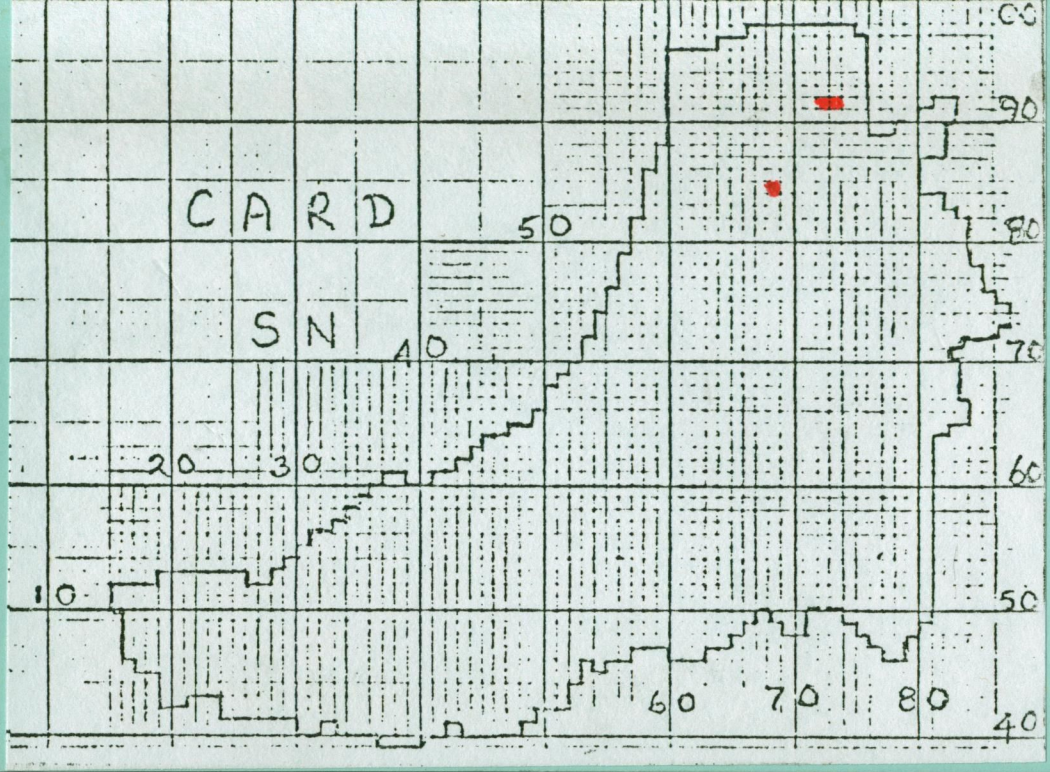
Elyite

Card.

Esgair Hir, 7291, 7391

Llechwedd Helyg 6884

Frongoch M.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Erythrite

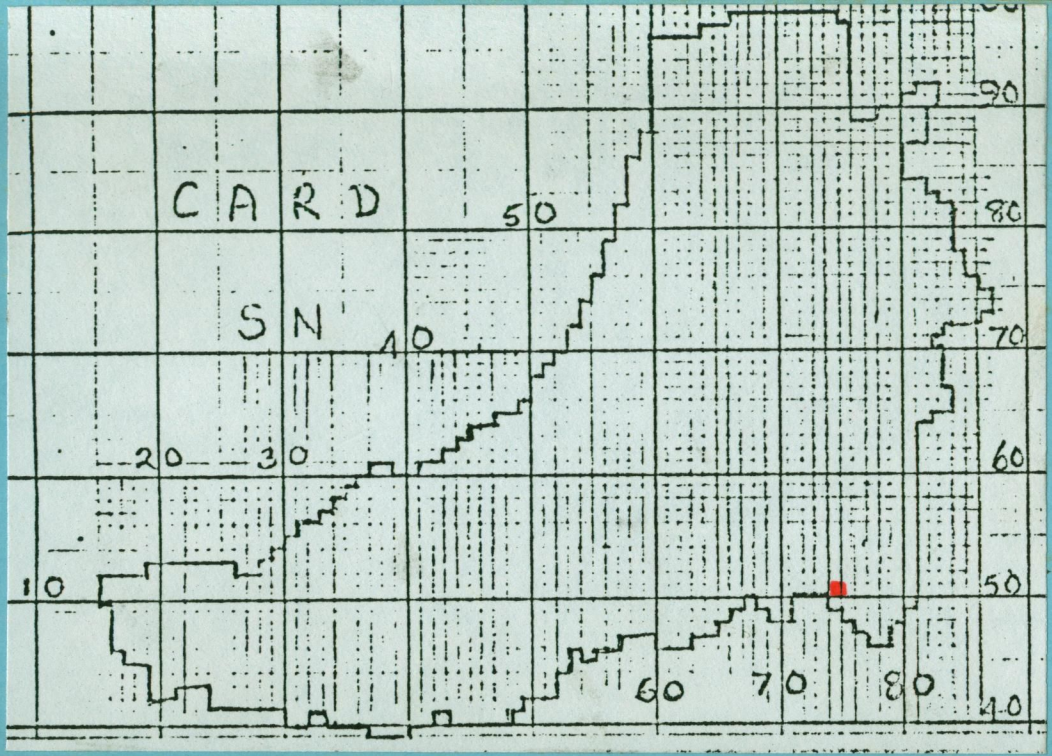
Card.

Swaith-yr-Afon M. (?)

Fluoride

Card.

Bryn-Amboy M 7450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L = one

GALENA, "LEAD ORE" (X - assumed) (I) CARD

Abbey Consols M (Ag) 7466
Aber Ffrwyd 6878
~~Aberystwyth Ms~~
Allt Ddu - ~~X~~ L 7178
Allt-y-Crib 6489 6589
Blaenceulan M 7190
Blaen Cennant 6977
Bodcoll M 7576
Bog M 7381
Bron Caradoc 6-6-
Bronfloyd M 6683
Bron Mwyn - ~~M~~ (one) 7164
Bron-y-Berllan - X 7-6-
Bron-y-Berllan N Lode - X 7-6-
Brynarian M 6691
Bryndeifi M - L 6893
Bryn Glas - L 7581 7681
Brynpica M - X 6982
Bryn-y-Gors - X 7-6-
Brynyrafr M 7487
Bwadrain M 7179
Bwlch M 7082
Bwlch-Glas M 7187
Bwlchrhennaid M - X 7082
Bwlch-y-Baedd - X 7070
Bwlch-y-Styflen 7386
Caegynon M 7278
Cae Nant (Ceunant) 7082
Camdwr L 7587
Camdwr Mawr M 7587

PTO

Pb (I)

Caron M 7265
Castell M 7780
~~Cefn Brwyno - X~~
Cefn Gwyn 6786
Cerigyrwyn M - X 6883
Clara M 7380 7480
~~Copa Nibl~~ Crown M (Cwmrheidol) X 7579
Crown Ms - X (Llanf. clydogau) 6-5 ~~Daniels~~ Nant Glas lode
Cwmbrwyno M X 7180
Cwm Canol - X 6983
Cwm Daren M 6883
Cwm Einion 7093
Cwm Erfin 6982
Cwm Leri 6489
Cwm Mawr 7367
Cwm Mwydion - X 7172
Cwm Pryf (?)
Cwm Sebon M (Ag) 6883
~~Cwm Symlog Ms~~
Cwm Ystwyth 7974 8074 8075 8175
Cwm Ystwyth S M 8074
Cwm Ystwyth W M 7874 7973 7974
Daren M (Ag) 6782 6783
Daren E M (Ag) 6983
Dolclettwr M 6591
Dolwen M 7878
Drosgol 7688
Elgar M 6586 6686
Erglodd M 6590

Cont'd (II)

GALENA, "LEAD ORE" (X - assumed) (II) CARD

Erwtomau M 7078
Esgair Ddu - X 7669
Esgair Llwr 7982
Esgair Hir 7291 7391
Esgair Mwn Ms (Ag) 7568 7569
~~Botynhoss~~
Foxpath M 7178
Fron-Goch M 7274
Fron-Goch W M 7074 7174
Gabwt lode - X —(?)—
Gelli M 7079
Glanrheidol M —(?)—
~~Glog Ms~~
Glog Fach ~~lode~~ 7470 7571
Glog Fawr ~~lode~~ 7470 7571

Goginan Ms (Ag) 6981
Goginan N lode - X 6981
Goginan S lode - X 6981(?)
Goginan W M 6680 6781
~~Gothic M~~
Graig Goch (~~Gwnnewydion~~) Lr. Llanf.-y-Cr. 7074 (Ag)
~~Graig Goch (Cwm Ystwyth) - X~~
~~Gt W Van M~~
Grogwynion (Ag) 7172 7072 7172
Gwaith Goch (Ystwyth Vall) X
Gwaith Goch (Rheidol Vall) 71
Gwaith-yr-Afon M - X 78
Gwar Cwm Bach - X } 6791 (?)
Gwar Cwm lodes - X }
Hafan M 7388

PTO

Pb (II)

Hendrefelen M 7169
Henfwlch M 7388
~~Kingside workings~~
Leri M 6788
Level Newydd - X (Ag) 7082
Level Riech -X 6982(?)
Lisburne Ms 7-7-
Lisburne New M 7-7-
~~Lisburne S M~~
Llanbadarn M —(?)—
Llancynfelyn M 6592 (Bre)
Llandewi Brefi - X 6655
Llanerch 6985
Llanfair M —(?)—
Llanfair Clydogau (Ag) 6251
Llanwr-y-Cwm 7085
Llechwydd Hen 6683
Llechwedd Helig 6884
Llettyhen M 6884 6885 6985
Llewyrnog 7381
Llewyrnog cross lode - X 7381
Llewyrnog W - X 7281 (?)
Llwyn Gwyddyl - X 7468
Llwyn Gwyn 6894
Llwyn Llwyd M 7468
Llwyn Malys M 6867
Llwyn Malys N lode - X
Log-y-Las M 7471 6868(?)
Loveden M 6694
Maen Arthur - X 7372
Melindwr M 6781 6881
Melyn-y-Bont-Goch - X —(?)—
Moel-y-Golomen 6987
Mynydd Gordu 6686

Cont'd (III)

GALENA, "LEAD ORE" (X - assumed) (III) CARD

Nant Eos Ms 7378
Nant-Fach-Ddu - X 6250
Nant Meirch - X ? 7781
Nant Syddion - X 7779
Nantycagal M 7389
Nant-y-Creiau M 7980
Nant-y-Creiau S M 7-8-
STEP ~~Nant-yr-Arian M Silverstream M~~
Ochr Rhos - X -(?)- ~~7081~~
Pant-au-Hyrion 7072
Pantmawr M 7078
Park Gate - X 6693 (?)
Park Lodge -X 6693 (?)
Penclayen M -L 7178 (?)
Pen Graig Ddu M 7182

Penlanfach M 7370
Penpontbren M 6590
Pen Rhiw M 7378
Pensarn M - X 6691
~~Pentre Brunant - X~~
Pentre Trinant - X Ore 6453
Pen-y-Banc 6590
Pen-y-Cefn M Ag. 6585 6685
Pen-y-Gist lode - X 7471
Plynlimon M 7985
Ponterwyd - X L 7480
Powell M - X L 7280
~~Pugh's workings~~
Pwll Roman M 6591
Rheidol Utd Ms 7178 PT O

Pb (III)

Rhiw Rigas lode 7178
Rhyd-yr-Henedd - X —(?)—
Rhysgog E lode - X 6853
Rhysgog Gadfach - X 6-5-(?)
~~Silver Stream M - X 7081~~
Swyddffynon M L 6966(?)
"Tal-i-Essin" 6983(?)
Tal-y-Bont Bridge - X 6-9-
Tal-y-Bont Ms - X 6-9-
Tan-yr-Allt M 6489 6589
Temple M 7479
Thomas Utd M 6-8-
~~Tre'r Ddol M~~
Tre Taliessin 6-9- (?)
Trwyn-y-Buarth - X —(?)—
Ty-Gwyn M (L) 7777
Ty-Llwyd M 6979

~~Tyn-y-Glog M - X~~
Tyn-y-Nant M - X —(?)—
Wen Allt M - X —(?)—
Ynys M 6893
Ystrad Einion M 7093
Ystumtuen Ms 7278 7378
Nant-Nôd M 7983 7984
~~[illegible]~~
Tynewydd M-X-(?)-
Bryn-ambor 7450
Nant Rhyd-talog 7952
Crosswood-X-6672
Cwm Rheidol (Ag) 7378
~~Fach Ddu mine~~
Rhysgog 6853
~~New Quay~~

Galena, "Lead Ore" (X-assumed) (IV) Card

E. Rhydtalog M 7952 (L)
Rhydtalog M 7952
Cwm y Graig goch 7158 7258
Cwm Brefi M 6954
~~Bentre Trinant~~
Esgair Gadfach M (Ag) 6653
Mynydd Bach M 6451 (?)
Gwaithvach 6351
Tan y gaer 6148
Ffrwdd (L) 5568
Wh Neptune 3860

Llangranog {3154 (?) or 3355 (?)
Tyn-y-ffordd {7579 7679 7680
Bwlch-gwyn M 7378
Tyny-fron M 7278
Esgair Vraith 7491
New Bog M 6591
Old Esgair lld (L) 7982
Poolds M (L) 7380
Cwm Rheidol 7378
Glan-Dwgan (?) 7075
Troed-rhiw-ruddwen 7747

pb (IV)

~~Llangranog - L 3355~~

Cwm Dulas - X? 6954

Bwlch-y-ddwyallt - X? 7063

Cardigan S Bog M. 7366

Graigen-ddu - ? 7765

Bryn Coryn - ? 7669

Bryn Melyn - ? 5863
(App Llanboidarn-Trefeglwys)

Cloddiau - ? 7269

Dologau - L 7773

Level Lampwll - ? 77 72

Ty-coch - ? 75 72

Pant-y-ffynnon - ? 7571

Pant-y-gwaith - ? 74 72

Blaencwm - ? 82 75(?)

Tan-y-llethr - ? 7374

E. Erongoch 7374

Brignant uchaf - ? 75 75

Brignant Consols - X 74 75

Aber Rhudnant - ? 7677

E Nant Rhudnant - ? 7877

Yspytty-Cynfyn - ? 76 78

Crown M (Cwmrheidol) - ? 75 79

Llanilar - ? 6174

Nantglas - L 7178

Geufron - ? 7078

Galena, "Lead ore" (L) (V) Card

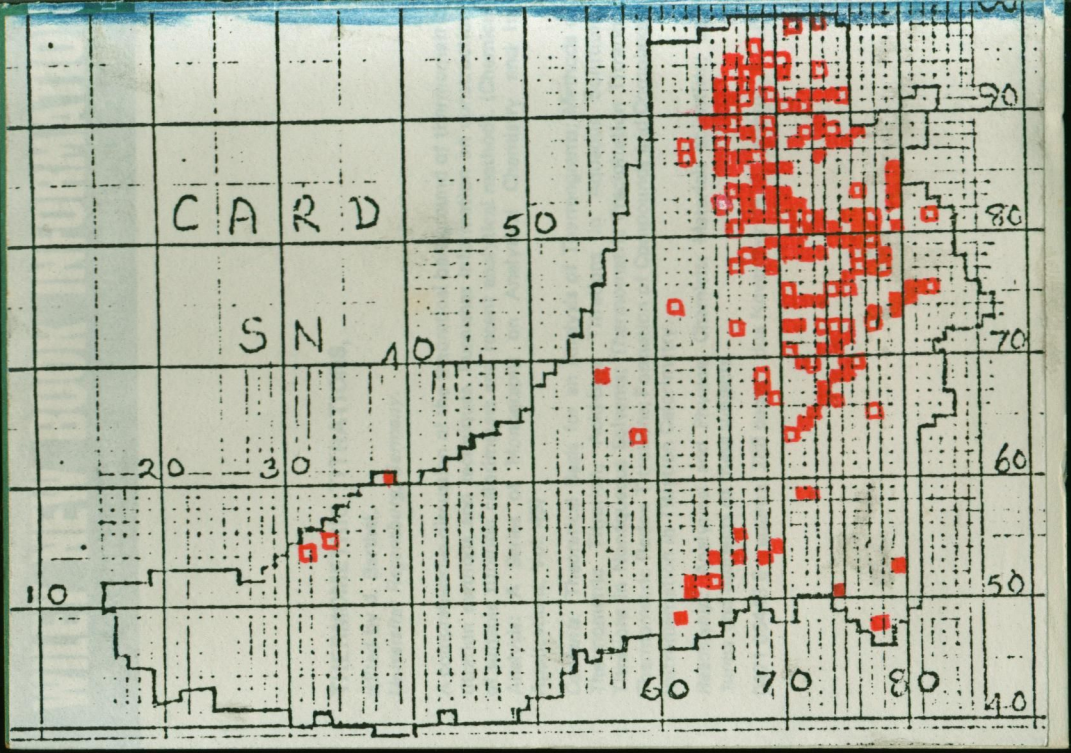
Abernant	68 78		
Coed Ty-llwyd – ?	67 78		
Nantyronen – ?	66 77		
Fagwr-fraith – ?	82 81		
Parc-gwyn – ?	76 80		
glan Castell – ?	75 81		
Esgair Nantyrarian – ?	70 81		
Cefn-llwyd – ?	76 83		
Ty'r-rhod – L	70 83		
Llyn-llygad – ?	79 87		
Spain – ?	73 88		
Nant-y-cwpl – ?	74 88		
Cyneiniog – L	72 88		
Cyncoed – ?	67 81		
Cefn llwyd – ?	65 82		
Elerch – ?	68 86		
E. Penycefn – ?	66 85		
Bwlch-y-dderwen – ?	69 89		
Ty-nant – ?	69 88		
Cynull-mawr – ?	65 87		
Berth-llwyd – ?	66 89		
Ty gwyn – ?	66 89		
Nevadd-fawr – ?	66 89		
Afon Ceulan – ?	66 89		
Pwll glas – ?	62 86		
Cil-olwg – ?	62 87		
Ty'n-y-craig – ?	66 90		

Pb (V)

Caer Arglwyddes – ? 6991
Coed-gwar-cwm – ? 6691 6791
Y Foel – ? 6692
Llwyn-crwn – ? 6792 6793
Llethy'r-fran – ? 6792
Ty'n-y-wern – ? 6692
Ty'n-y-llwyn – ? 6592
Llwyn wallter – ? 6792
Ty'n-y-garth – ? 6994
Lluest-grafia – ? 7591
Ynis-hir – ? 6895
Bwlch-y-garreg – ? 7290
Creigiau duon – ? 7090
Blaeneinion – ? 7393
Cae-mardin – ? 7094 7194
Bwlch-y-maen – ? 7094
Maescylin – ? 7397
Caerhedyn – ? 7197
Pandy M 6791
Nantycreau W

Galena, "Lead ore" VI

Card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Germaniferous sphalerite Card.

Devils Bridge (?) 7-7-

gersdorffite Card.

gwaith-yr-Afon M.

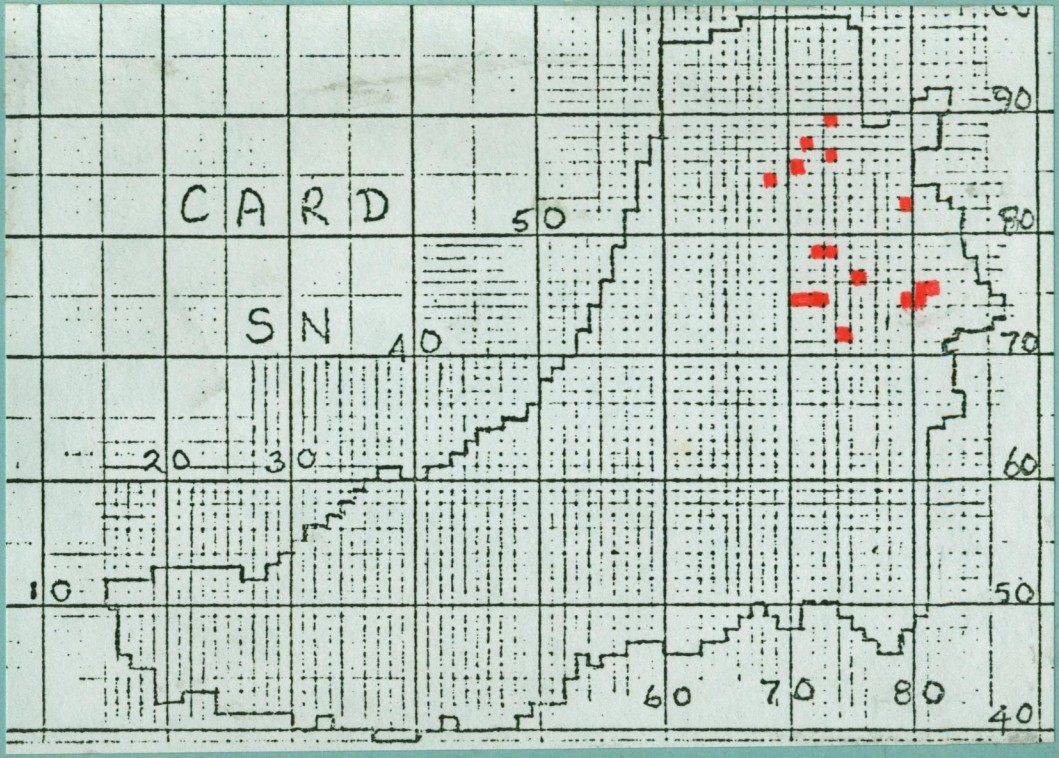
gibbsite Card.

Nanty cagal M

GOETHITE, "LIMONITE" OCHRE" GOZZAN" etc. CARD

Bodcoll M 7576
Caegynon M 7278
Esgair Llue 7982
Fron-Goch M 7274
Fron-Goch W M 7074 7174
Log-y-Las M 7471
Nantycagal M 7389
Bwlchyptyllen (ochres)
Bwlchglas M (limonite) 7187
Llanwor-y-cwm 7085
Ystumtuen ("Ochre") 7278 7378
Cwm Ystwyth M's 7974 8074 8075 8175
Old Esgairlle ("Ochre") 7982

Llechwydd Helig "gozzan" 6884
Goaith-yr-Afon M.
Drosgol
LletEythen M. 7386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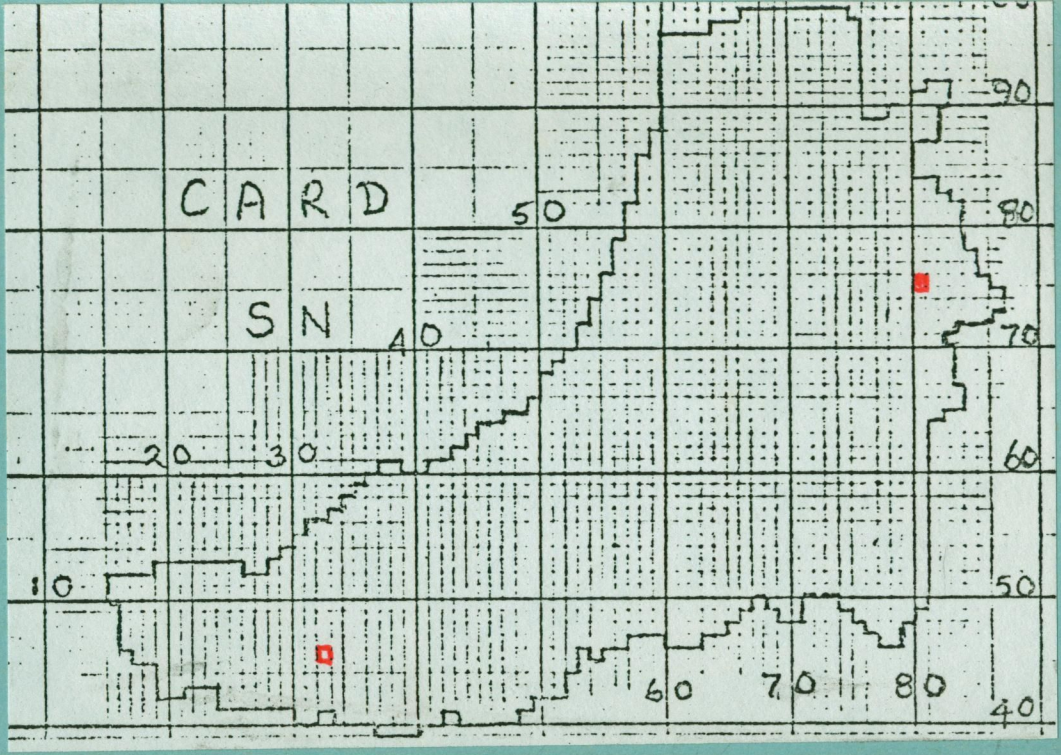
GOLD CARD

(Copper Hill) Cwm Ystwyth SN 8175

Troedyraur (?) 3245

Nantycagal M (?)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Greenockite

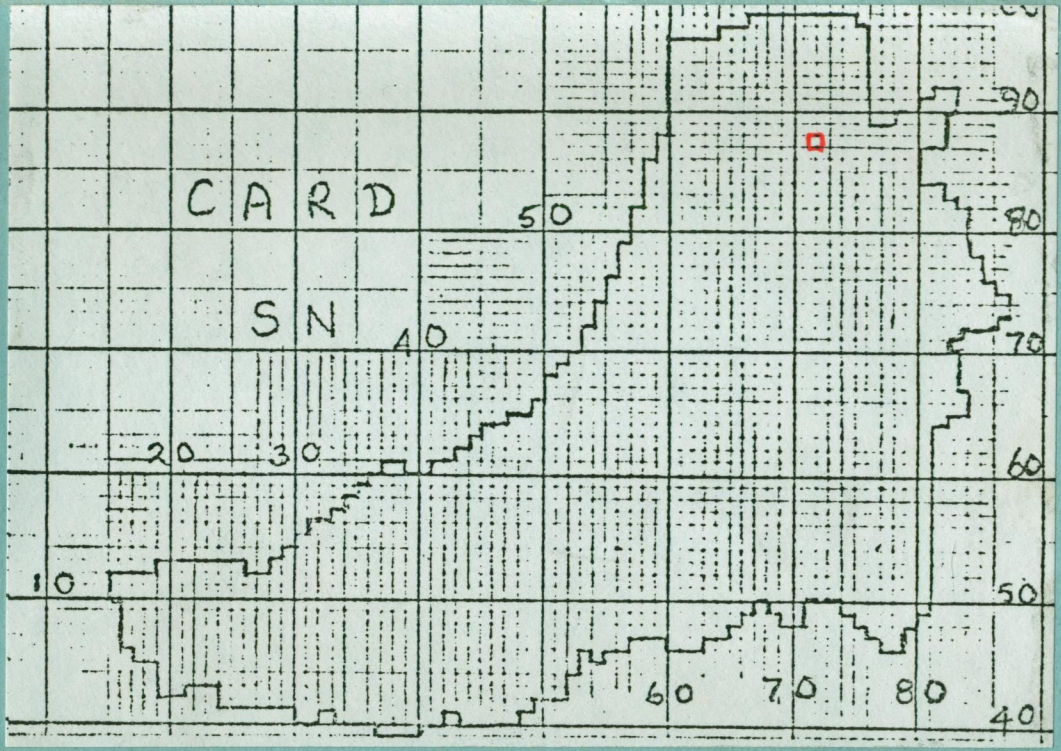
Carol

Bulch-Glas M (?) 7187
Castell M (?) 7780

Gudmundite

Esgaer Hîr 7291, 7391

Card.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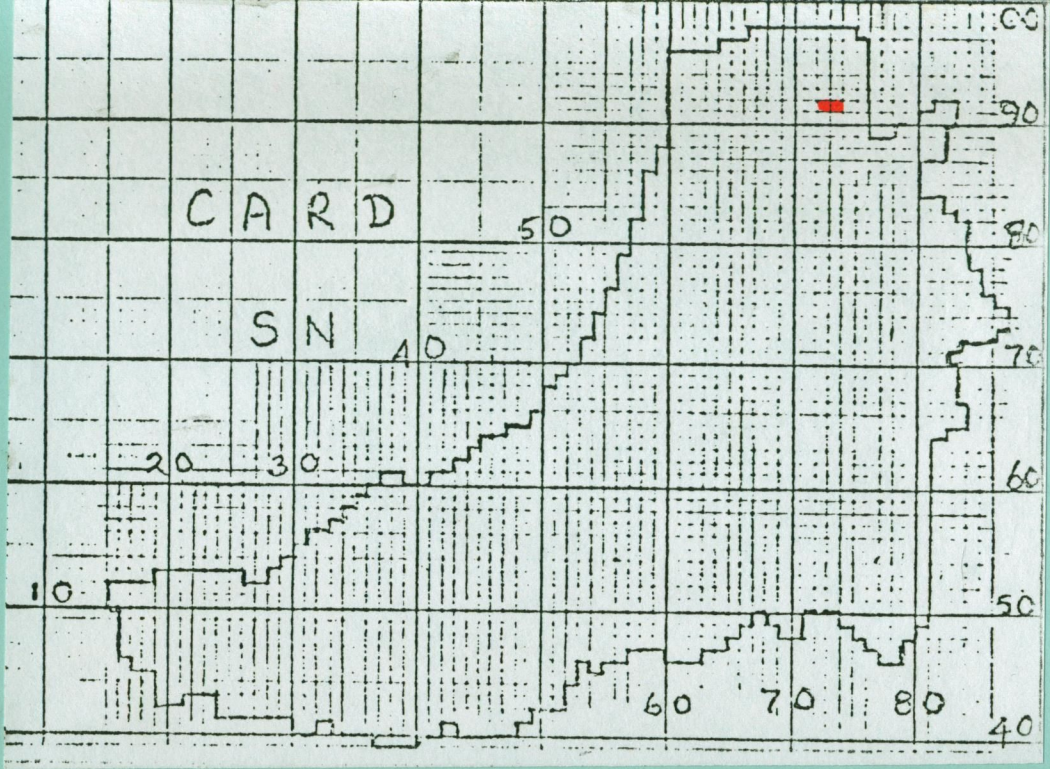
Gudmundite Catd.

Esgair Hîr 7291, 7391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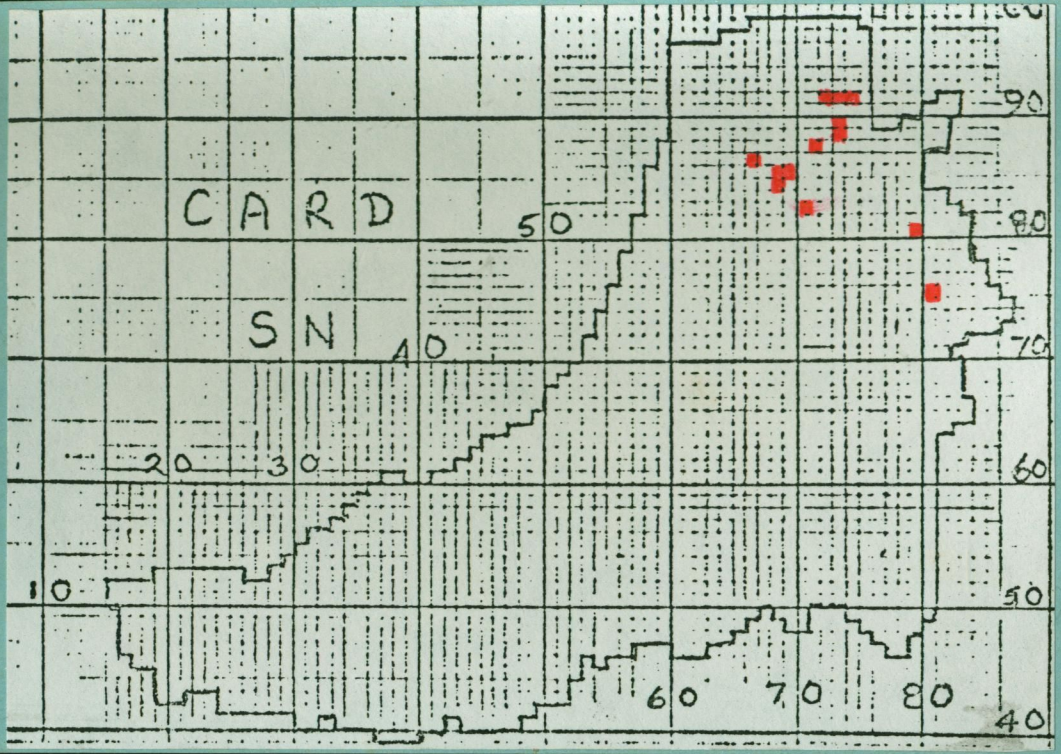
HEMIMORPHITE

CARD

Esgair Vraith 7491
Nantycagal M 7389
Nant-y-Creiau M 7980
Bwlch M 7082
Llethyhen M 6884 6885 6985
bwlch-glas M 7187
Esgair Hir 7291 7391
Cwm Ystwyth 8075
Hên Fwlch 7388
Bwlch rhennaid M 7082
Mynydd gorddu 6686

Frongôch M
Penrhiw M
Nantycreiau W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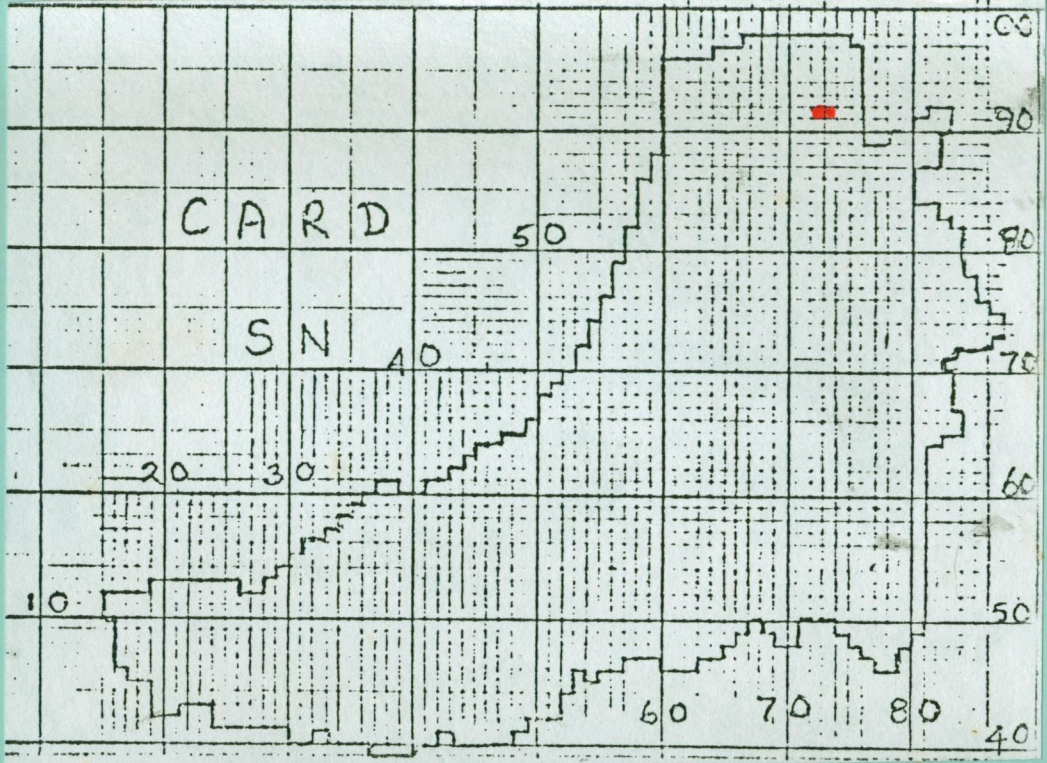
Hydrocerussite

Card

Esgair Hîr 7291, 7391

Frongôch M

Nantycagal M (?)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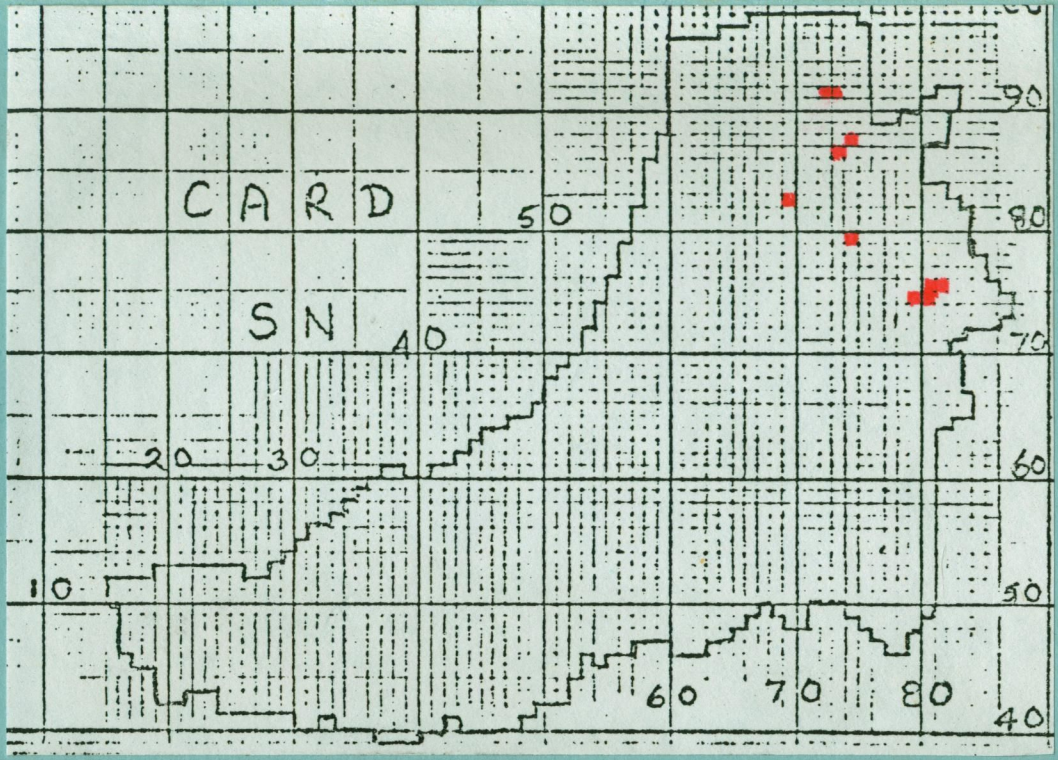
Hydrozincate

Card

Cwm Erfin 6982
Bryniprafr 7487
Bwlch y Skyllen M 7386
Temple M. 7479
Cwm Ystwyth M's 7974 8074 8075 8175
Esgair Hir 7291, 7391
Frongoch M. (?)
Nanty cagal M (?)
Pen Rhiw M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Jarosite

Card.

Gwaith-yr-Afon M

MM

Lanarkite

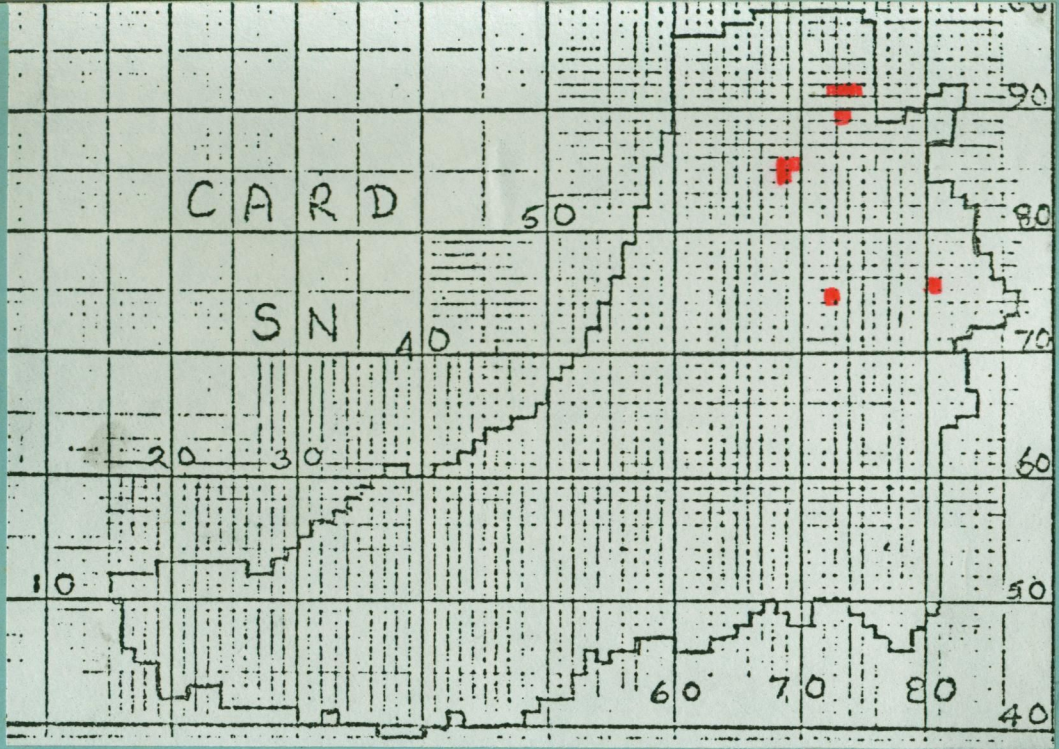
Card.

Frongôch M

Nantycagal M (?)

LANGITE CARD

Esgair Hir 7291 7391
Esgair Vraith 7491
Fron-Goch M 7274
Llettyhen M 6884 6885 6985
Nantycagal M 7389
Cwm Ystwyth Mls 8075
Gwaith-yr-Afon M. (?)
Lodge Park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Laumontite Card.

Nandycagal M.

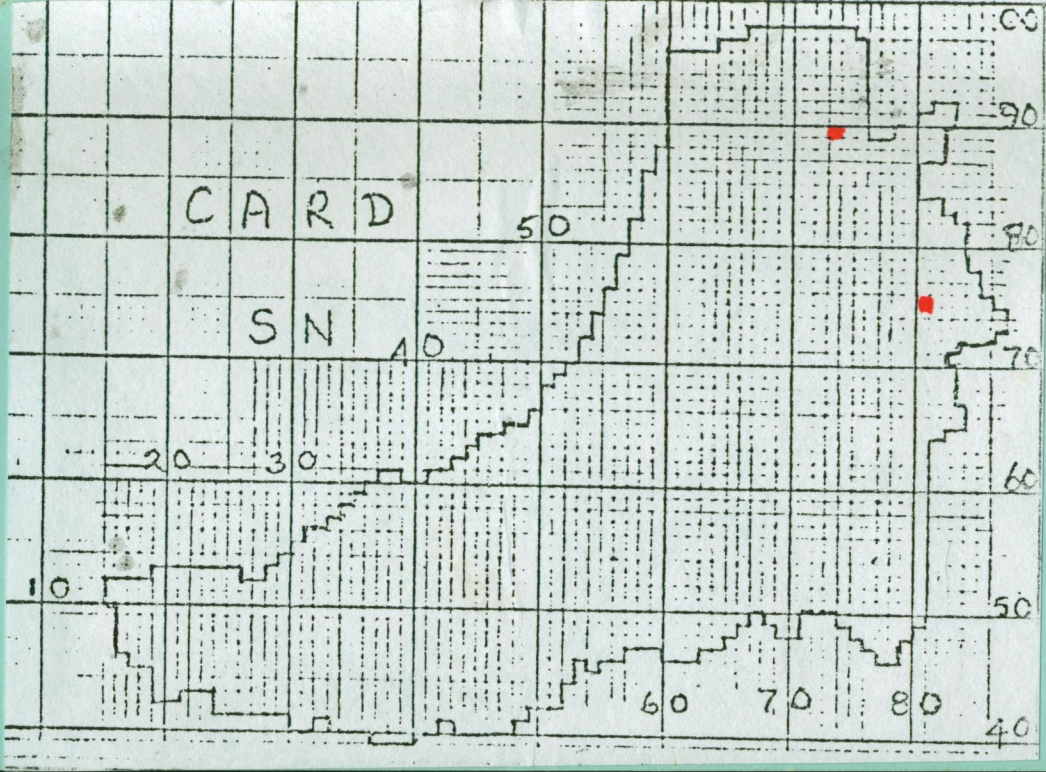
Lauterthalite, Card.

Nantycagal M. SN 73 89

Cwm Astwyth 8075

Frongôch M.

Pen Rhiw M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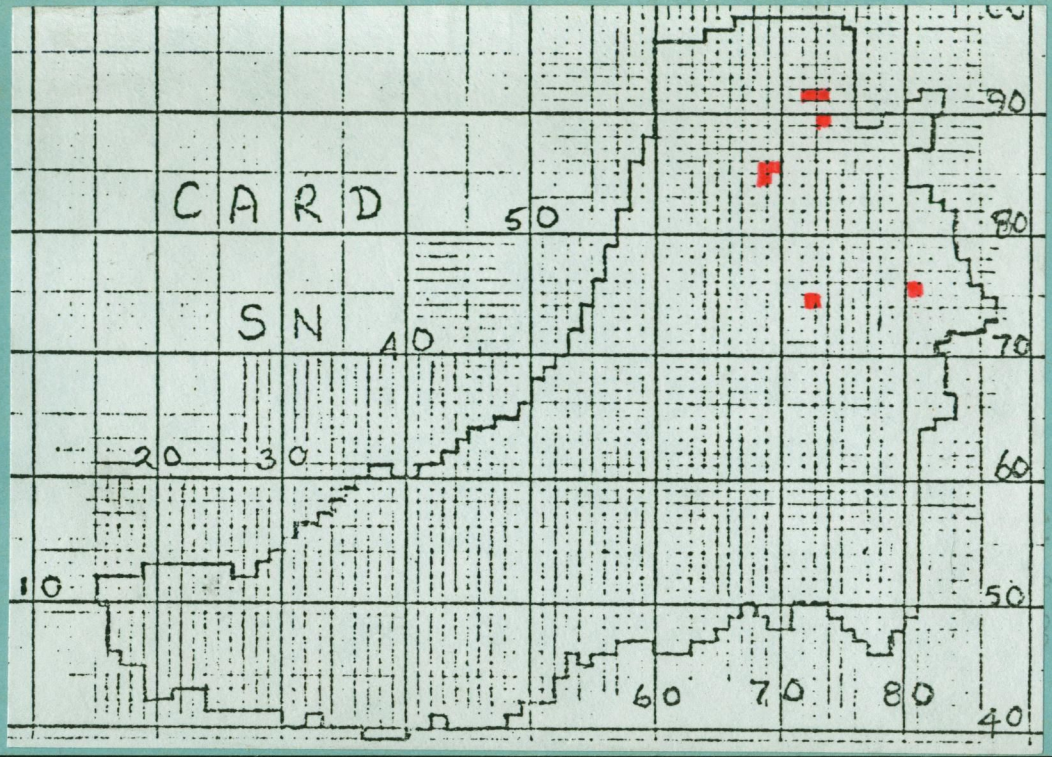
LEADHILLITE [cf susannite] CARD

Esgair Hir 7291 7391 ——— (?)
Fron-Goch M 7274 ——— (?)
Llettyhen M 6884 6885 6985
Nantycagal M 7389
Cwm Ystwyth 8075
Hen Fwlch M [?]
Pen Rhiw M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LINARITE CARD

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Esgair Vraith 7491
Fron-Goch M 7274
Glog Ms Fach, G. Fawr 7470 7571
Hafan M 7388
Nantycagal M 7389
Llethyhen M 6884 6885 6985
Cwm Ystwyth 8075
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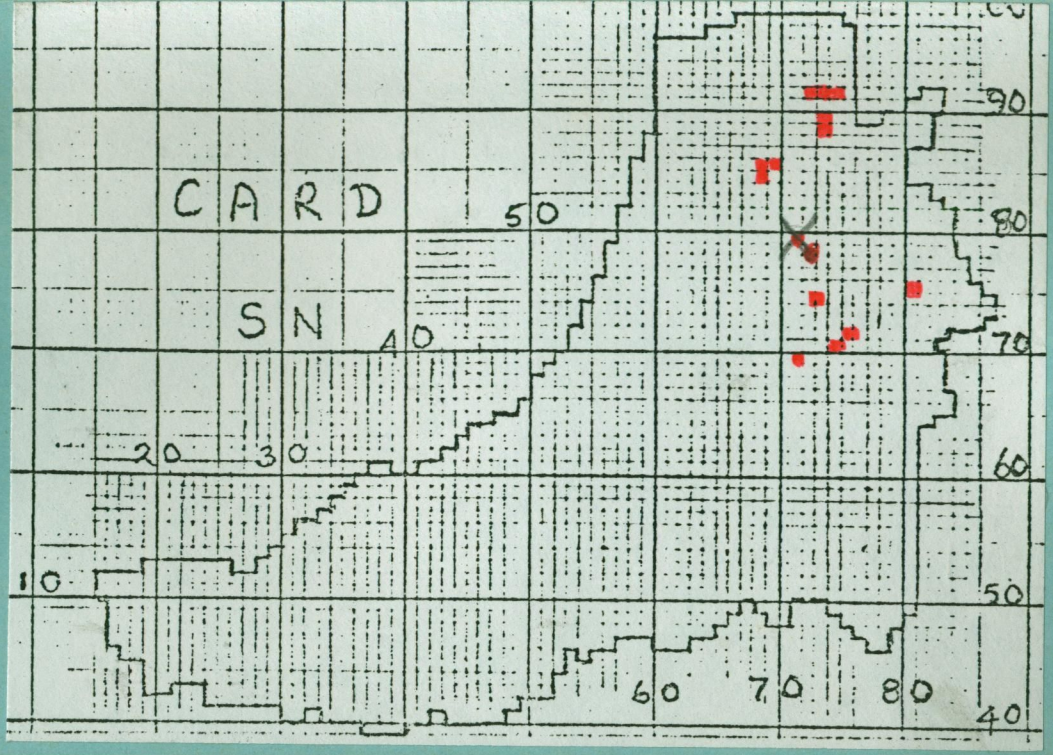
Gwaith-yr-Ffon M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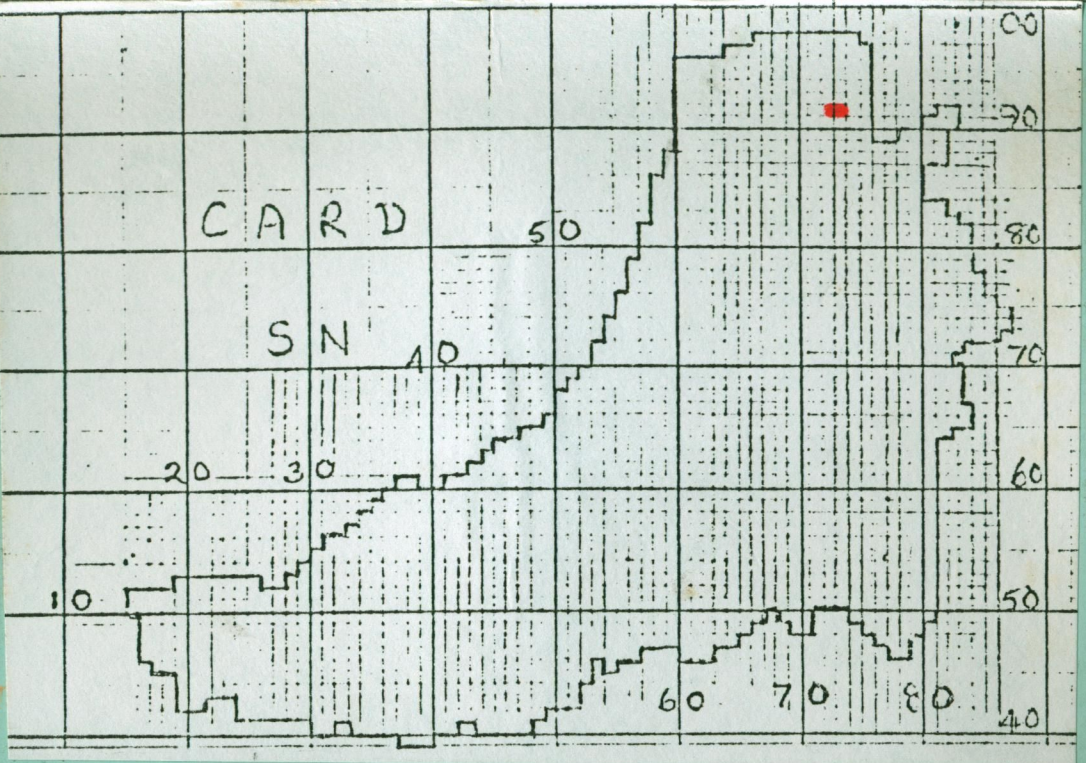
Linnaeite Card.

Esgair Hîr, 7291, 7391 (?) [? = siegenite, q.v.]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Litharge Card.

Frongoch M

Lithiophorite Card

Drosgol
Llethyhen

MALACHITE CARD

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Esgair Vraith 7491
Fron-Goch M 7274
Nantycagal M 7389
Glôg Fach, G. Fawr 7470 7571
Llethyken M 6884 6885 6985
Llechwedd helyg M 6884
Penrhiw M 7378
Bwlchgwyn M 7378
Cwm Ystwyth M's 7974 8074 8075 8175
Hendrefelen 7169
Hafan M
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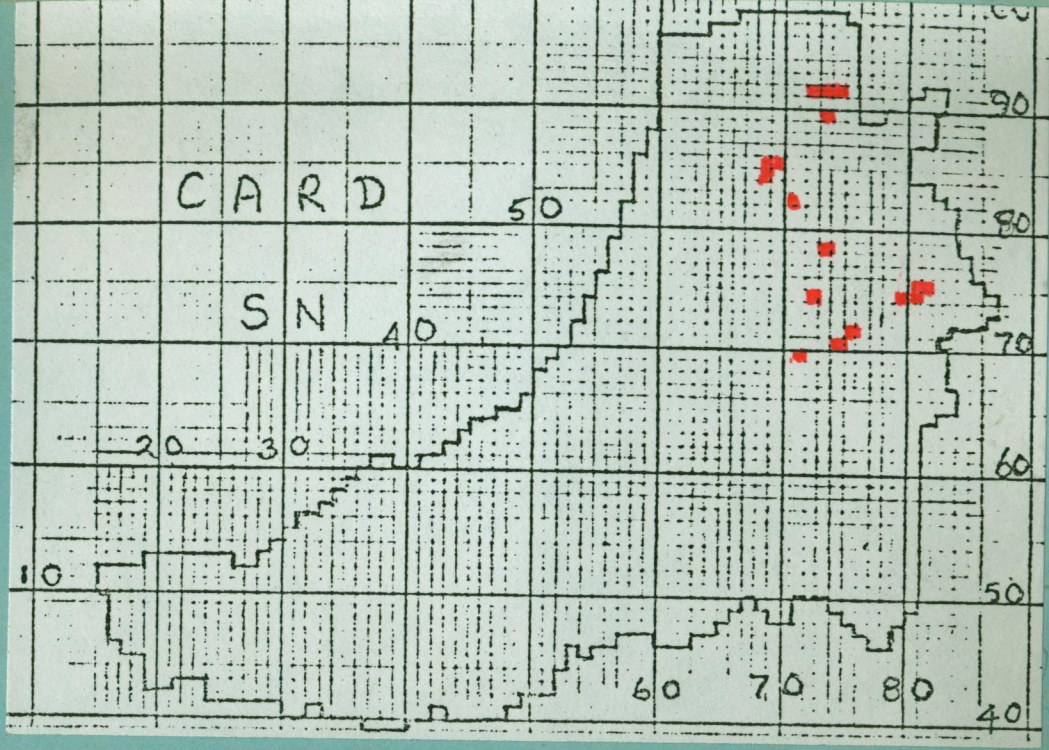
Gwaith-yr-Afon M
Dolwen M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"MANGANESE ORE" CARD

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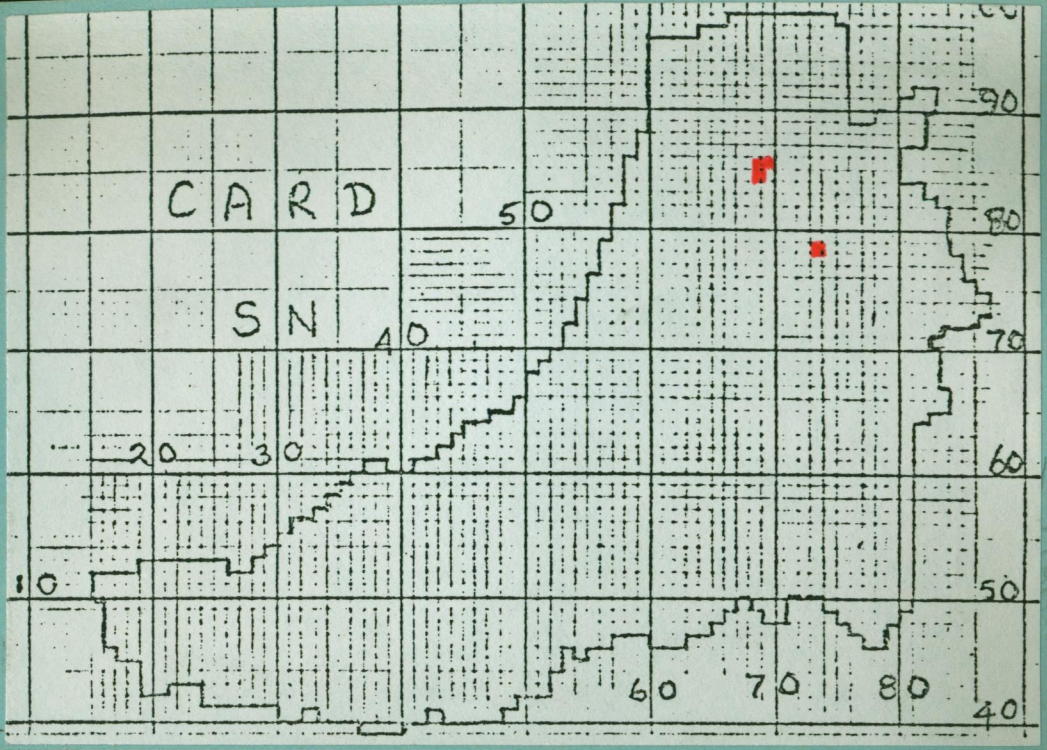
Cwm Rheidol 7378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MARCASITE

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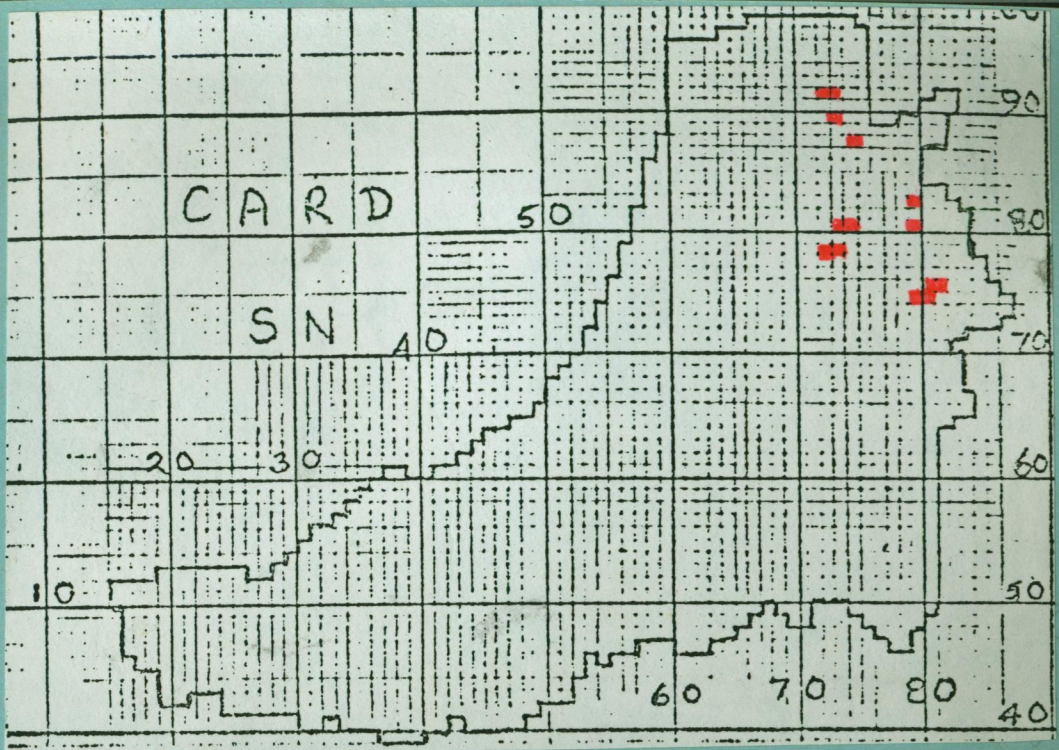
Caegynon M 7278
Clara M 7380 7480
~~Esgair Llu~~
Nant-y-Creiau M 7980
Pen Rhiw M 7378
Ystuntuen Ms 7278 7378
Bwlchgwyn M 7378
Tyn-y-ffon M 7278
Old Esgairlle 7982
Cwm Ystwyth M's { 7974 8074 / 8075 8175
Nantycagal M 7389
Esgair Hft 7291, 7391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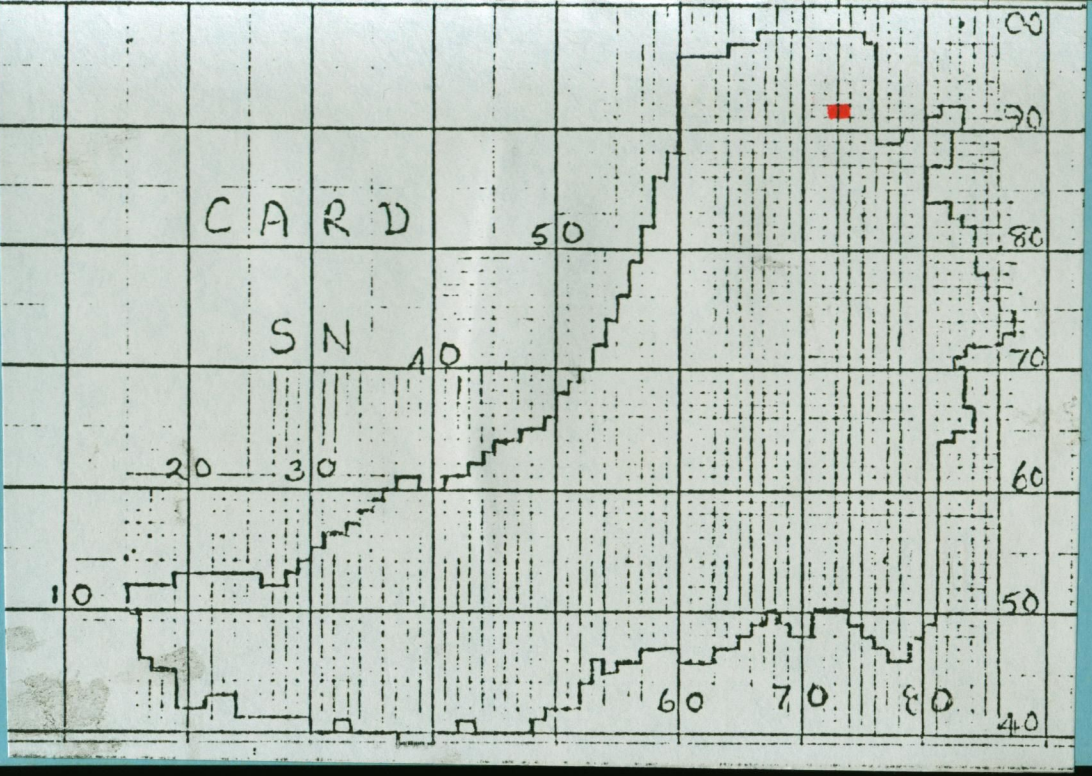
Caud

Frongoch M (?)

Mattheddleite Card

Esgair Hîr. 7291 7391
Frongôch M
Naulycaegal M.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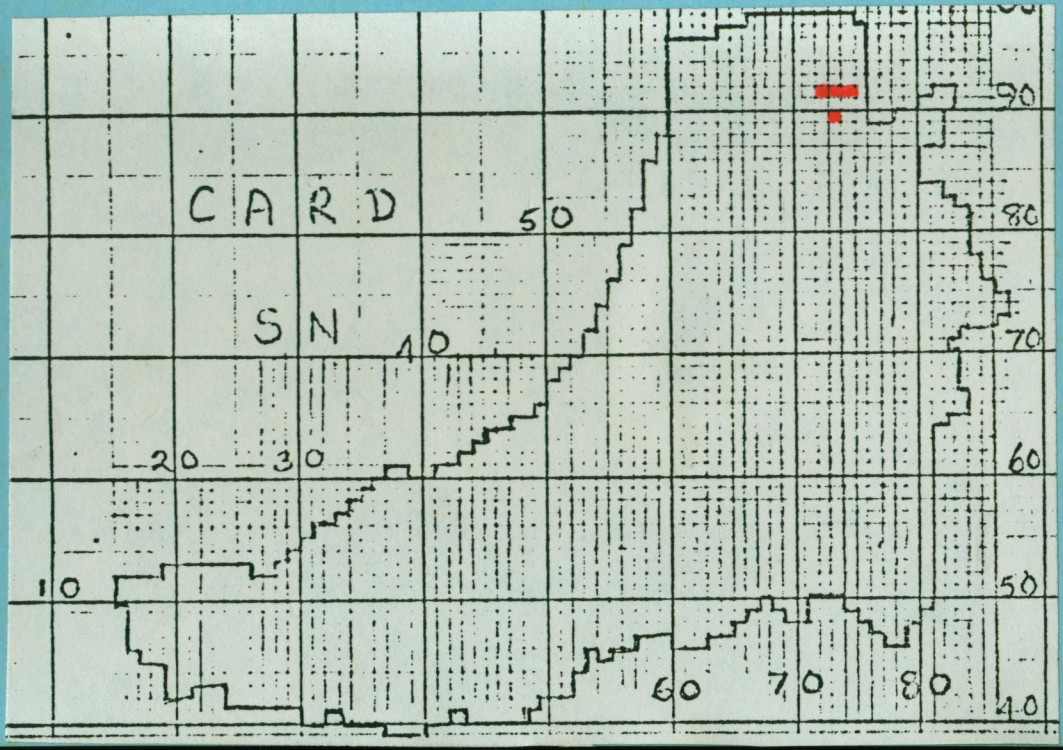
Esgair Vraoth 7491

Esgair Hir 7291 7391

Bryn-yr-Afr M 7487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Mimetite

Cardig's.

Darren M.

Hendrefelen M.

~~Talianin M.~~

Gwaith-yr-Afon M.

Monazite Card

(Newcastle Emlyn [Carm.]) area.
Prosgol

Muscovite Contd

Brynyrafr M SN 7487
Esgair Hir M SN 7391
Dernen M SN 6782
Castell M SN 7781

Namuwite

Card

Frongôch M

Olivenite

Card.

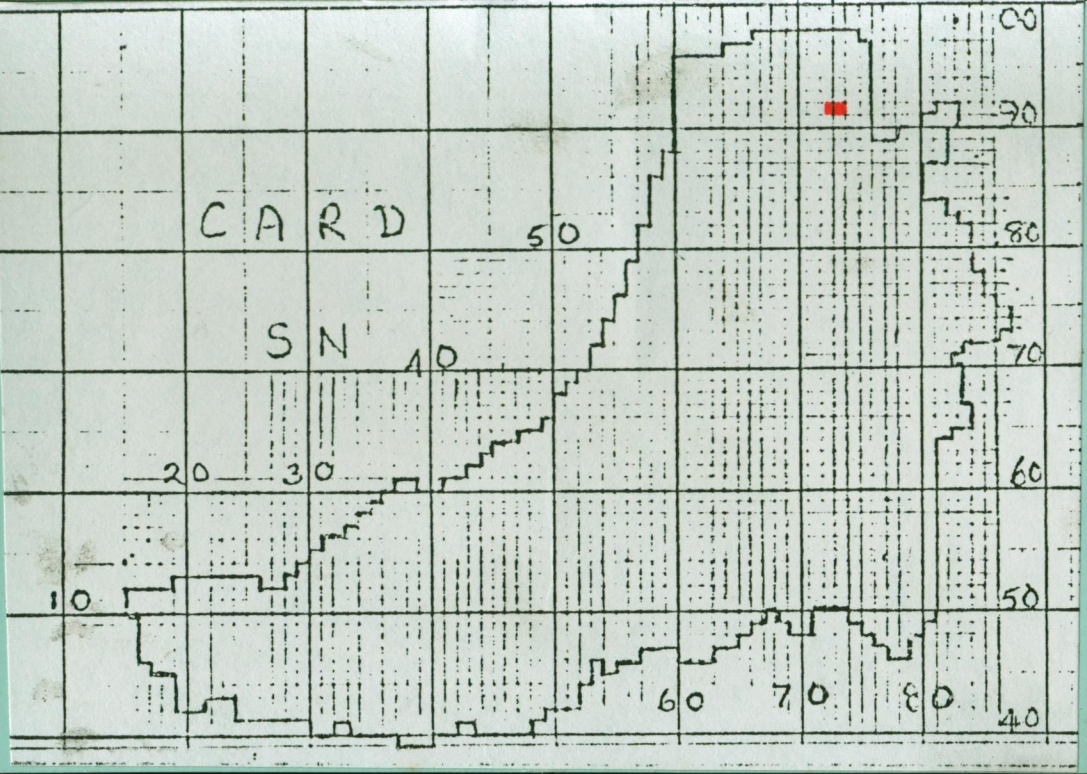
Gwaith-yr-Afon M

Parnauite Cont'd.

Growth-yr-Mon M

Rentlandite Card

Esgair Hir (Cobaltan) 7291, 7391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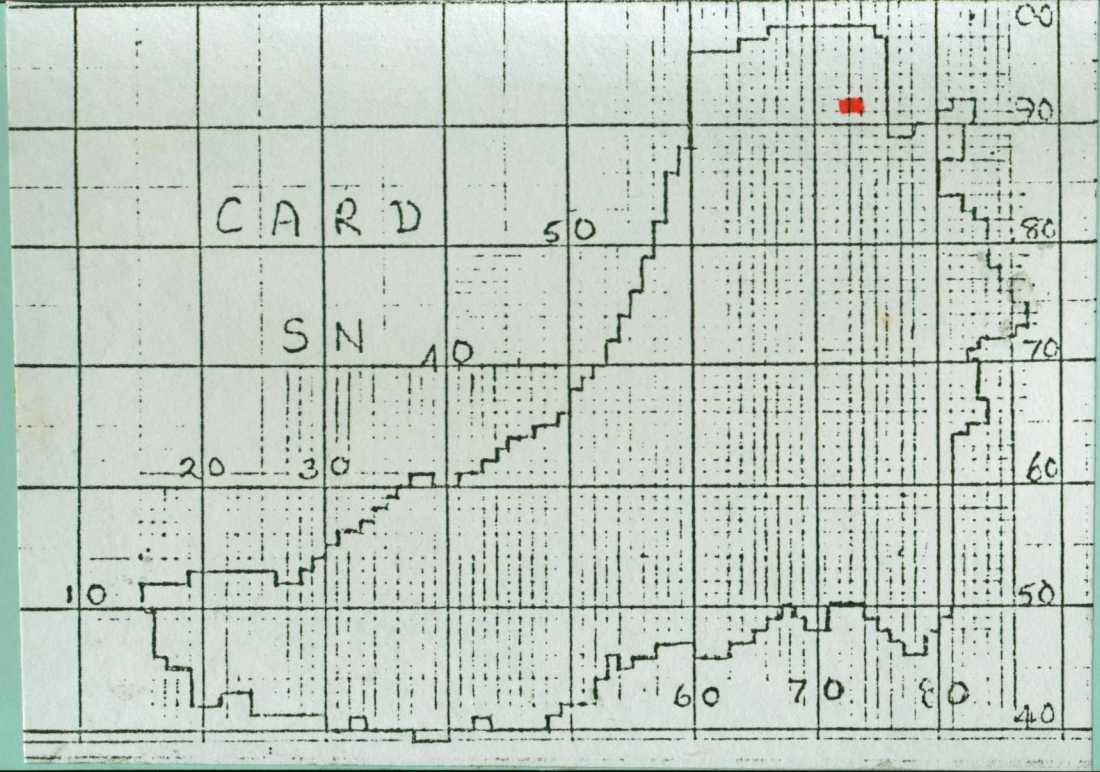
Pharmacosiderite Card.

Gwaith-yr-Afon M

Phlogopite

Esgair Hîr, 7291, 7391

Card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Phosgenite Card.

Nantycagal M.

Posnjakite Coral

Pen Rhiw M

PYRITE

Bryn-yr-Afr M 7487
Caegynon M 7278
Camdwr Mawr 7567
Cwm Ystwyth 7974 8074 8075 8175
Erglodd M 6590
Esgair Llue 7982
~~Eatymtoan~~
Fron-Goch M 7274
Grogwynion 7172
Pen Rhiw M 7378
~~Pugh's Workings~~
Ystumtuen Ms 7278 7378
Cwm-Rheidol 7378
Bryn-Ambor M 7450
Ffrwdd 5568
Wh. Neptune 3860
Esgair Hir 7291, 7391

Castell M 7780
Nantycagal M CARD
Tyn-y-fron M 7278
Bronfloyd M 6683
Bwlchystyllen M 7386
Llanwrtycwm 7085
Goginan W 6680 6781
Hafan M 7388
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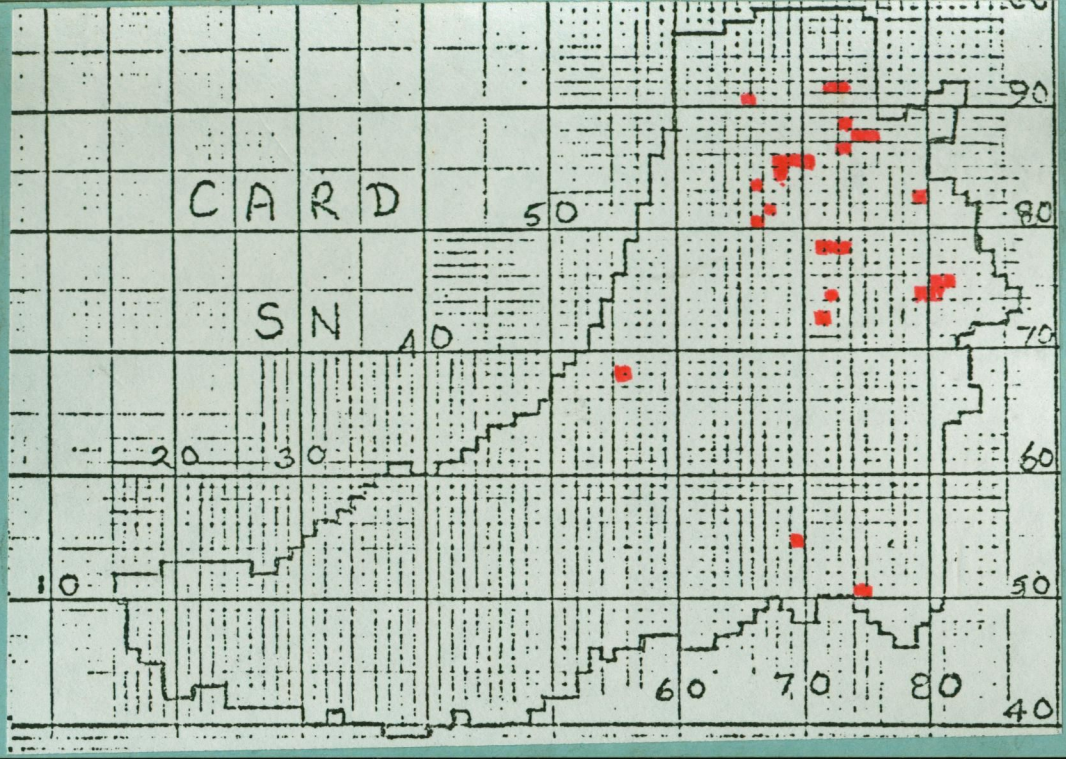
Old Esgairlle 7982
Rheidol Hld M 7178
Cwm Brefi 6954
Llettyhen 6884 6885 6985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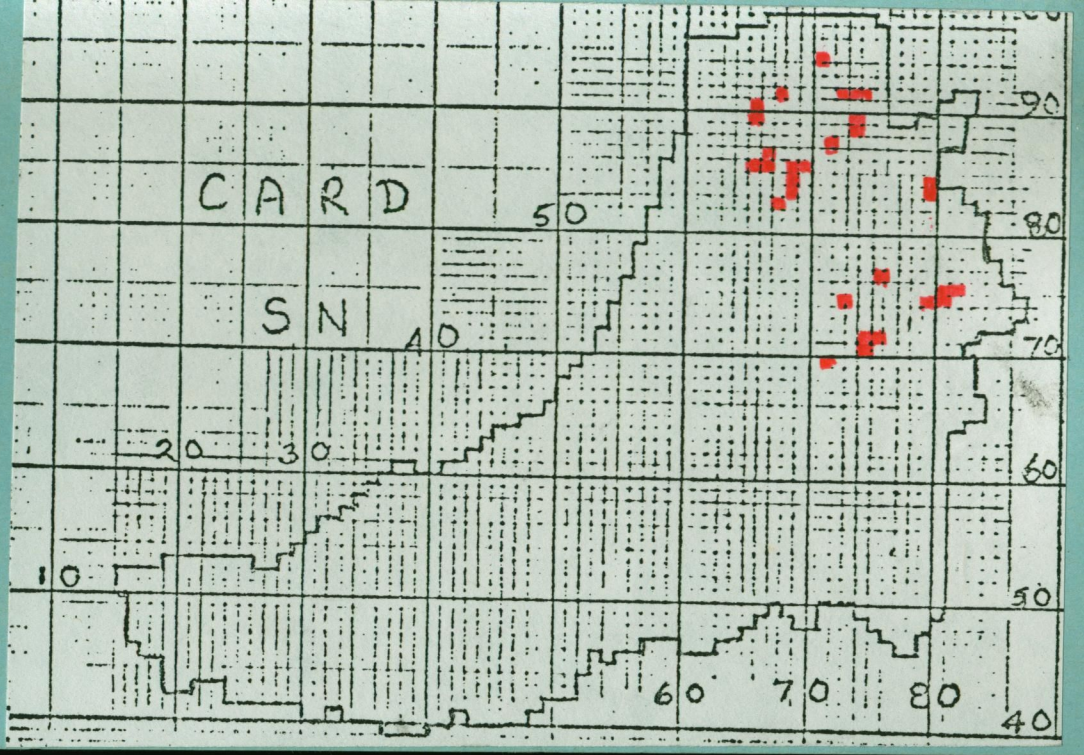
PYROMORPHITE

CARD (I)

Bodcoll M 7576
Bwlch-Glas M 7187
Devils Bridge 7--7-
Esgair Hir 7291 7391
Fron-Goch M 7274
Glog Ms Fach, G. Fawr 7470 7571
Hafan M 7388
Llettyhen M 6884 6885 6985
Log-y-Las M 7471
Pen-y-Cefn M 6585 6685
Llechwedd helyg M 6884
Nantycagal M. 7389
E. Penycefn 6685
Cwm Ystwyth M's 7974 8074 8075 8175
Nant-Nôd M 7983 7984

Nant-y-Creiau 7980
Hendrefelen 7169
Esgair Vraith 7491
Allt-y-Cwb M 6589
Cwmdaren M 6883
Daren M 6782
Hên Fwlch 7388
Mynydd gordu 6686
Pandy M 6791
Pen-y-Banc 6590
Ystrad Einion M 7094
Cowtell M 7780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Pyrom Card (TT)

Dolwen M (brown)

QUARTZ (I)

Allt-y-Crib 6489 6589
Bodcoll M 7576
Bronfloyd M 6683
Bwlch M 7082 7187
Bwlch-Glas M
Cae Nant (Ceunant) 7082
Castell M 7780
Cefn Gwyn 6786
~~Cwm Nant~~ Cwm Brefi 6954
Cwm Daren M 6883
Cwm Erfin 6982
Cwm Sebon M 6883
Cwm Ystwyth 7974 8074 8075 8175
Daren E (Cwmsymlog) 6983
Devils Bridge 7-7-
Esgair Llúe 7982
Llancynfelyn 6592

CARD

Esgair Hir 7291 7391
~~Botyntoon~~ Es. Mwn 7568 7569
Fron-Goch M 7274
Glog Ms Fach, G. Fawr 7470 7571
Goginan M 6981
~~Gt W Van M~~ Cwm Brefi 6954
Grogwynion 7172
Lisburne Ms 7-7-
Log-y-Las M 7471
Nantycagal M 7389
Nant-y-Creiau M 7980
Pen-y-Cefn M 6585 6685
~~Pugh's workings~~
Temple M 7479
Ystumtuen Ms 7278 7378
Cwm Mawr M. 7367
Cwm Canol M 6983

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Qtz I

Croswood 6672
Fron Goch W.M. 7074 7174
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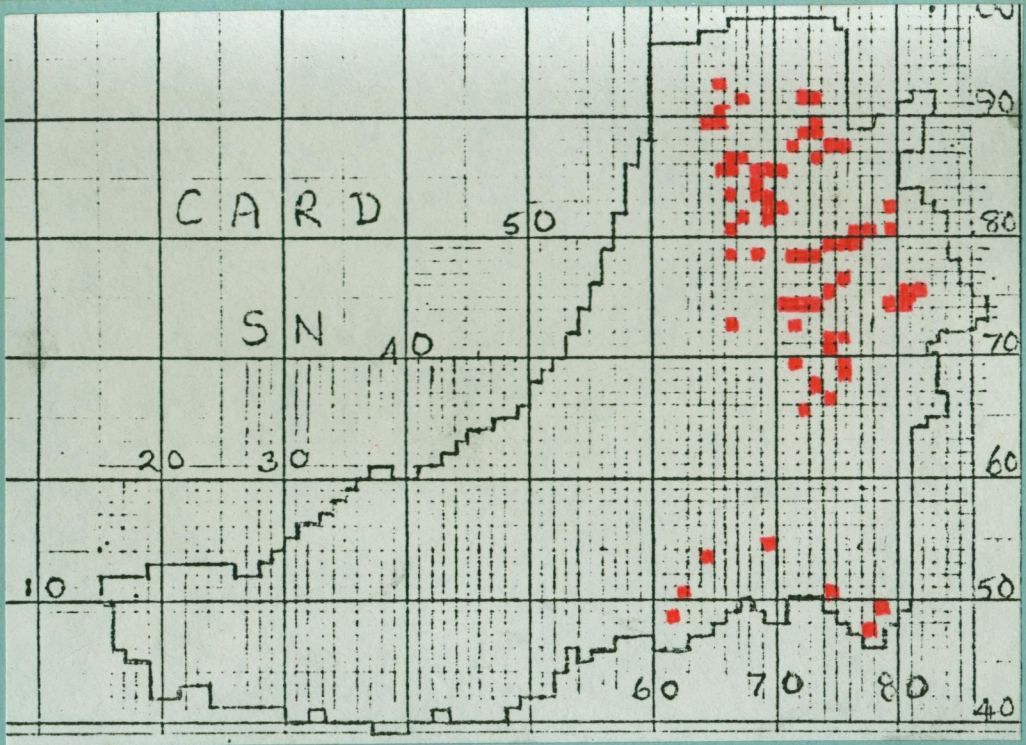
Brynyr-afr M 7487
Llettyhen M 6884 6985 6985
Troed-rhiw-Ruddwen 7747
Dalar-wen 7849
Bryn-Ambor M 7490
Pentre Trinant 6453
Nant Fach Ddu 6250
Tan y Gaer 6148
Wh. Neptune 3860
Tyn-y-fron M 7278
Caegynon M 7278
Llechwedd helyg 6884
Tyn-y-ffordd 7579 7679 7680
Penrhiw M 7378
Bwlchgwyn M 7378
Camdambor M 7587
Llanwrt-y-cwm M 7085
Hafan M 7388
Henfwlch M 7388
Rheidol Uld M. 7178
Abbey Consols M 7466

QUARTZ (II) Card.

Caron 7265
E. Frongoch 7374
Brignant 7475
Abernant 6878
Cyneiniog 7288
Goginan West 6680 6781
Hendrefelen M 7169
Pandy M 6791
Pen y Banc 6590
Mynydd gordu 6686

Dolcletwr M
Erglodd M
Gwaith-yr-Afon M
Cwmbrwyno M (?)
Llewyrnog M (?)
Hendre Q
Nantycreian W
Darren M SN 67 82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Queitite

Card

Pen Rhiw M.

Ramskeckete

Card

Brynarian M
Per Rhiw M
Frongôch M
Nantycagal M
Ystumtuen M's

Ramsdellite Card

Drosgol

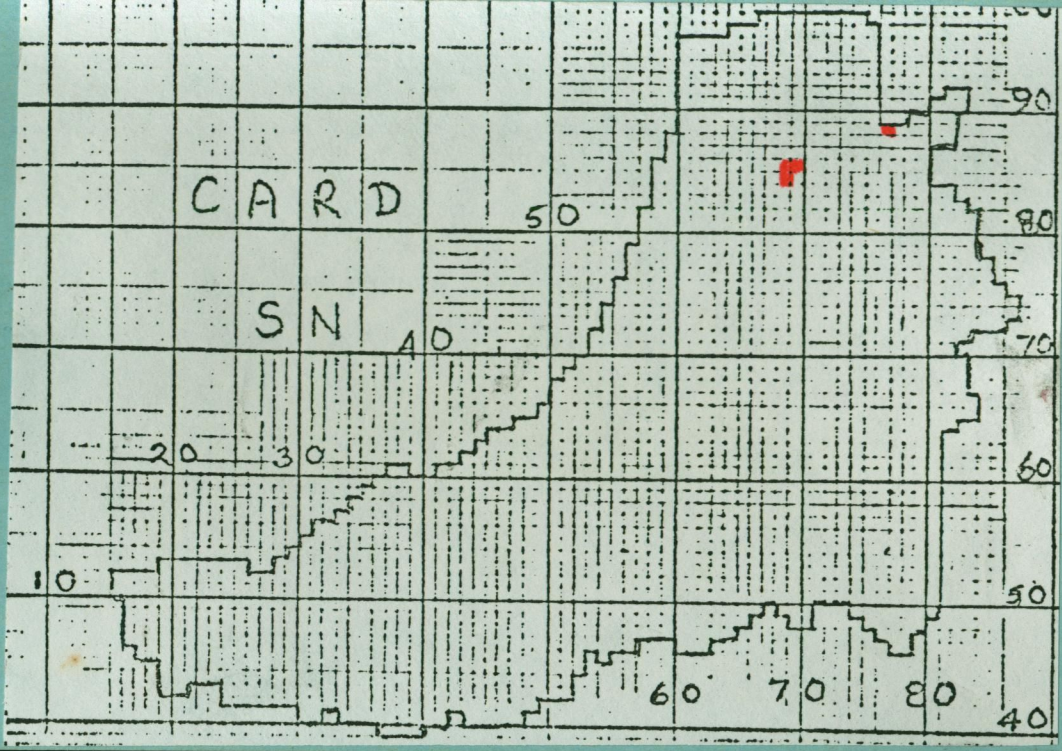
Redgillite Card

Nantycagal M

PSILOMELANE " " ROMANECHITE CARD

Drosgol 7688

Llethyhen 6884 · 6885 6985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Rosasite

Card.

Gwaith-yr-Afon M.

Frongôch M

Rutile Card.

Brynyrafr M SN 74 87
Darren M SN 67 82
Castell M SN 77 81

Schmiederite

Card.

Nantycagal M (?)

Llechwedd Helyg (?)

Fron Goch M (?)

Schulenbergite Card.

Clom Ystwyth mines 8075

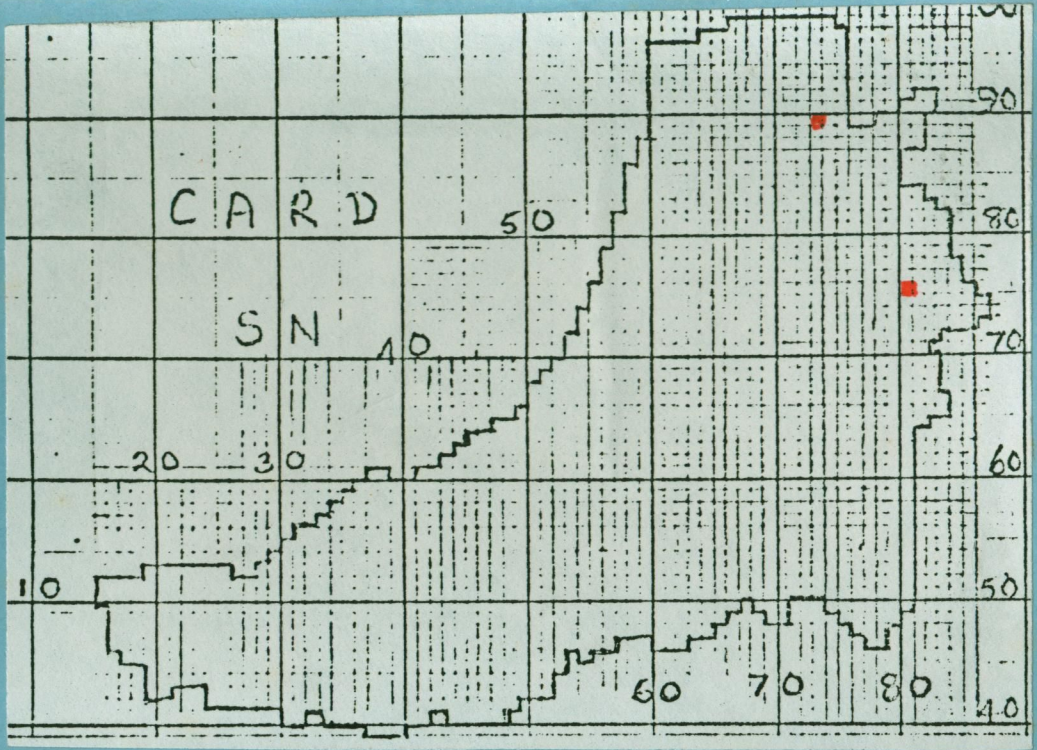
Nantycagal mine 7389

Pen Rhiw M

gwaith-yr-Afon M. (?)

Frongoch M

Ystumtuen M's (?)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Scorodite Card.

Gwaith-yr-Afon M (?)

Scotlandite Cont'd

Nant-y-Cagal (?) ("possible")

Serpiente

Carol

Esgair Vraith 7491

Nantycagal mine 7389

Com Ystwyth (?) 8075

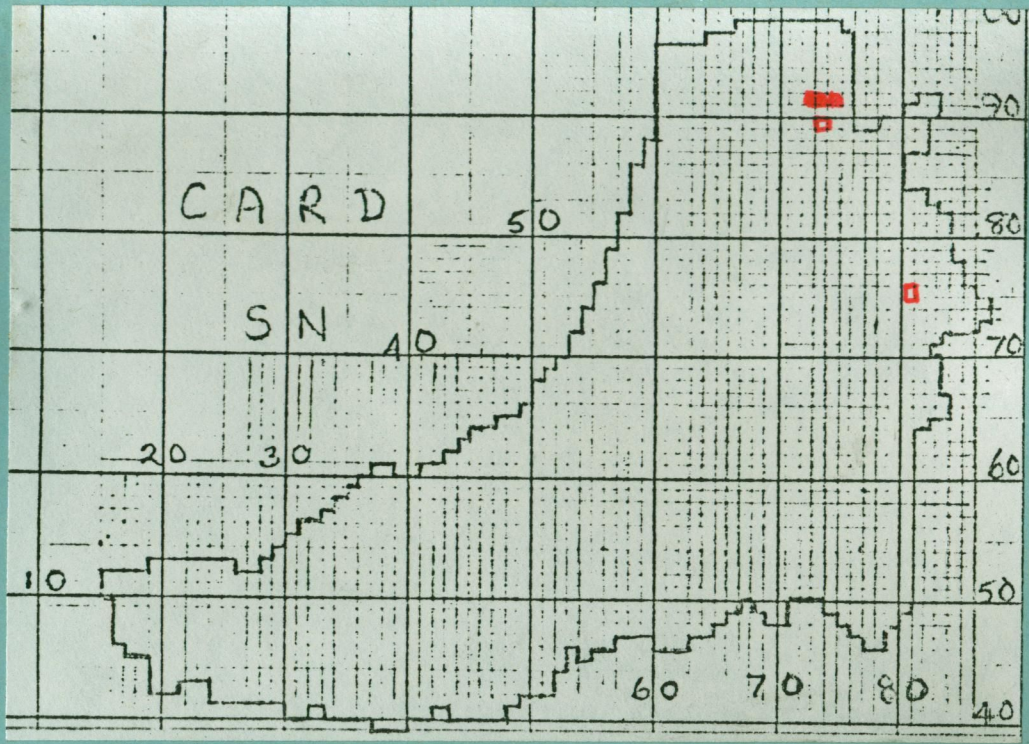
Esgair Mtr 7291, 7391

Gwaith-yr-Afon M (?)

Frongôch M

Pen Rhiw M

Henfwlch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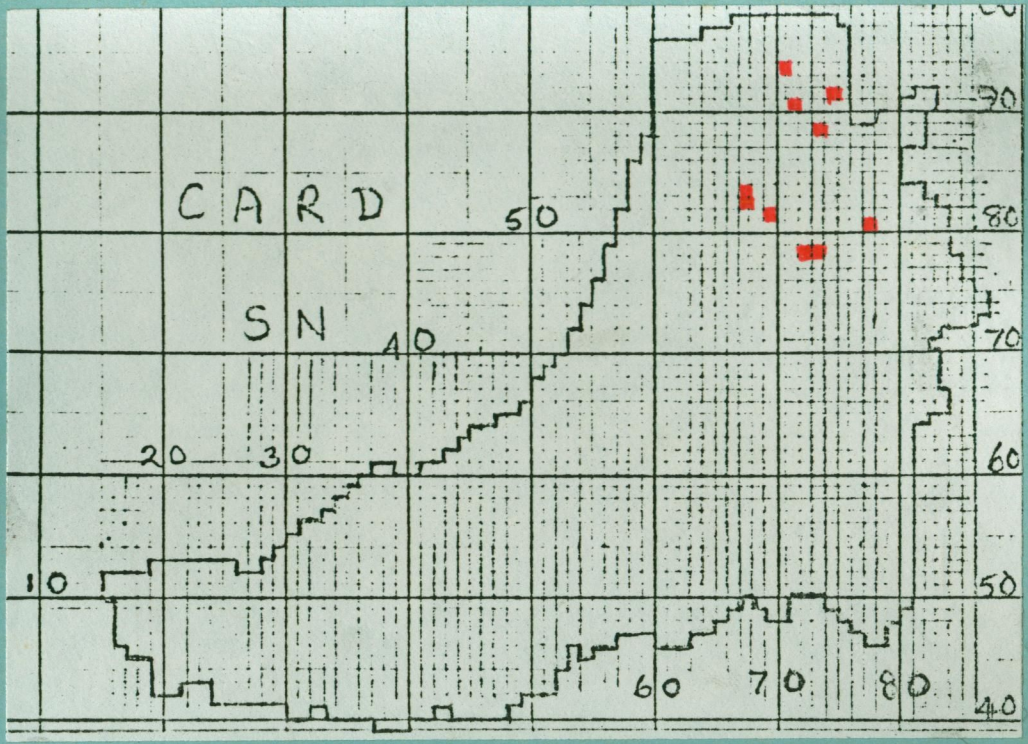
SIDERITE CARD

Blaenceulan M 7190
Castell M 7780
Daren M 6782 6783
Esgair Vraith 7491
~~Estymteon~~
Goginan M 6981
Henfwlch M 7388
Ystrad Einion M 7093
Ystumtuen 7278 7378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Siegende Card.

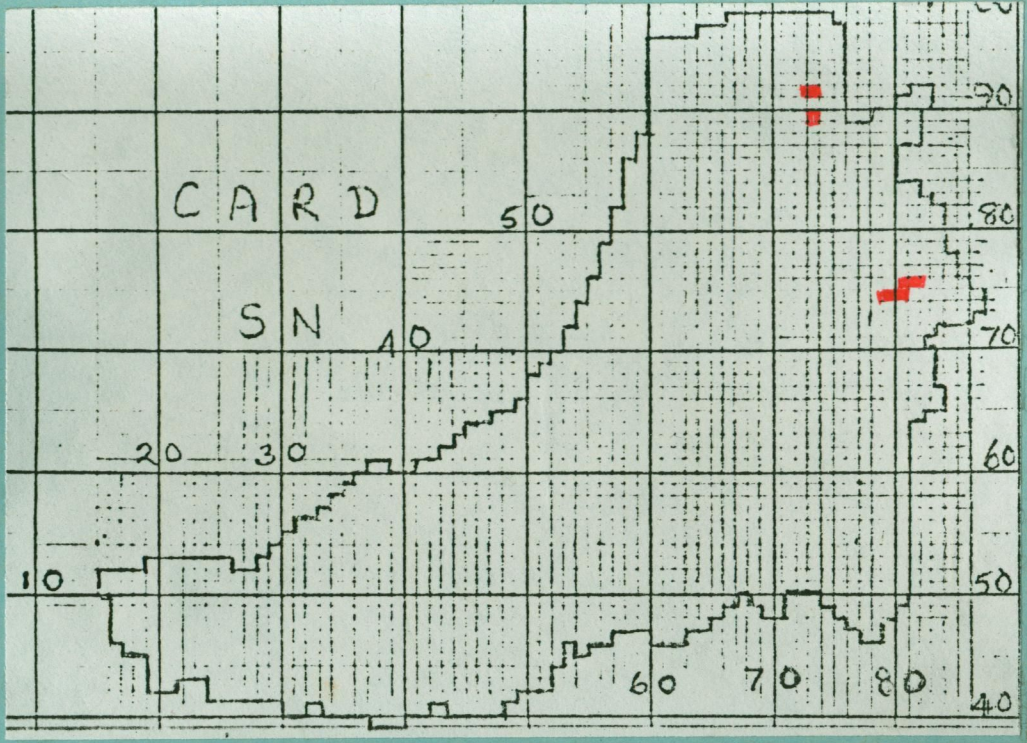
Erglodd M
Nautycagal M (?)
Esgair Hir M (?)
Loveden M.

SMITHSONITE CARD

Cwm Ystwyth 7974 8074 8075 8175

Nantycagal M 7389

Esgair Hir 7291, 7391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SPHALERITE, "ZINC ORE" (I) CARD

Abbey Consols M 7466
~~Aberystwyth Ms~~
Allt-y-Crib 6489 6589
Blaenceulan M 7190
Blaen Cennant 6977
Bog M 7381
Brynarian M 6691
Bryn-yr-Afr M 7487
Bwadrain M 7179
Bwadrain S M 7178
Bwlch M 7082
Bwlch-Glas M 7187
Bwlch-y-Styllen 7386
Caegynon M 7278
Camdwr [Mawr] 7587

Camdwr Bach M 7489
Castell M 7780
Cefn Gwyn 6786
Clara M 7380 7480
~~Copa Hill~~ Caron M 7265
Cwmbrwyno M 7180
Cwm Erfin 6982
Cwm Mawr 7367
Cwm Sebon 6883 M 7178
~~Daniella~~ Nant Glas ~~lode~~
Dolclettwr M 6591
~~Dolwen M~~
Drosgol 7688
Elgar M 6586 6686
Erglodd M 6590 PTO

ZnI

Erwtomau M 7078
Esgair Llu 7982
Esgair Mwn Ms 7568 7569
~~Estymteon~~
Foxpath M 7178
Fron-Goch M 7274
Fron-Goch W M 7074 7174
Glanrheidol M —(?)—
Glog Ms Fach G. Fawr 7470 7571
Goginan M 6981
Graig Goch (~~Gwmnewydion~~) 7074
~~Gt W Van M~~ Llanfihangel
Grogwynion 7172
Gwaith Goch (Ystwyth Vall)
Hafan M 7388 7072 7172
Henfwlch M 7388
~~Kingside workings~~
Gwaith Goch (Rheidol Vall) 7178

Leri M 6788
(Lisburne Ms) (7—7—)
~~Lisburne S M~~
Llanwr-y-Cwm 7085
Llechwydd Hen 6683
Llechwydd Helig 6884
Llettyhen M 6884 6885 6985
Llewyrnog 7381
Llwyn Llwyd M 7468
Llwyn Malys M 6867
Log-y-Las M 7471
Mynydd Gordu 6686
Nant Eos Ms 7378
Nant Gaerdyn lode 7582
Nantycagal M 7389
Nant-y-Creiau M 7980
Nant-y-Creiau W M 7879

Cont'd (II)

(2)

SPHALERITE, "ZINC ORE" (II) CARD

Penpontbren M 6590
Pen-y-Cefn M 6585 6685
Plynlimon M 7985
~~Pugh's workings~~
Rheidol Utd Ms 7178
Rhiw Rigas lode 7178
Rhiw Rigas N lode 7-7-
Temple M 7479
Thomas Utd M 6-8-
Ty-Gwyn M 7777
Ystrad Einion M 7093
Ystumtuen Ms 7278 7378
Devils Bridge (Germaniferous) 7-7-
Cwm Canol M 6983
Tal-y-bont 6-9-
"Tal-i-essin" 6983(?)

~~Inch Idol M~~
Cwm Rheidol 7378
~~Bwlch M 7082~~
~~Bwlchysgyllen~~
Esgair Hir 7291 7391
E Rhydtalog M 7952
Rhydtalog M 7952
Cwm y Graig Goch {7158 7258
Pentre Trinant 6453
Tyn-y-ffordd {7579 7677 7680
Bwlchgwyn M 7378
Penrhiw M. 7378

PTO

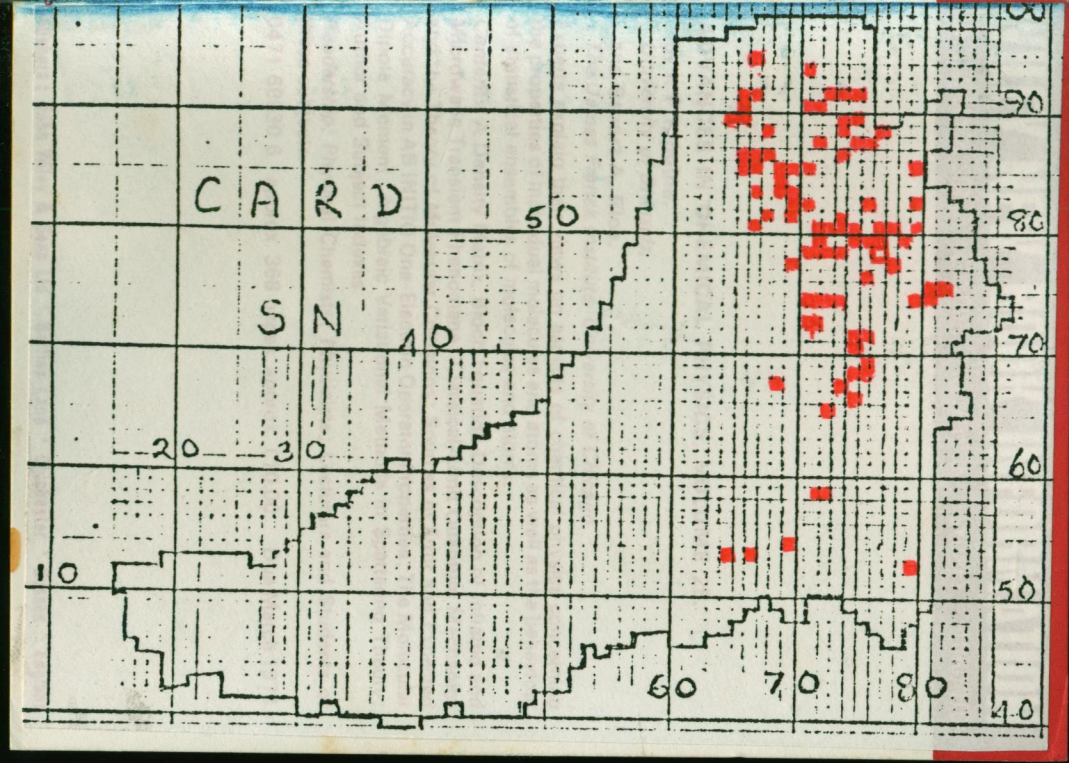
Zn II

7974 8074
8075 8175

Tynyffron M 7278
Cwm Ystwyth S M 8074
Esgair Vraith M 7491
Loveden M 6694
New Bog M 6591
Old Esgairelle (Zn) 7982
Ponterwyd (Zn) 7480
Pooles M (Zn) 7380
Powell M (Zn) 7280
Nant Rhuddnant 7777
Bodcoll M 7576

Cwm Ystwyth Ms
Llechwedd-llwyd 7090
Pwll Roman 6591
Goginan W 6680 6781
~~Nantglas 7178~~
Allt Ddu 7178
~~Bwlchgwyn 7378~~
Yspytty-cynfyn ? 7678
E. Frongoch 7374
Esgair Gadfach 6653
Cwm Brefi 6954
Goodh-yr-Afon M

Sphalerite, "Zinc Ore" (III) Card.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Steverustite Coerd

Fron Goch M
Bwlch Glas M
Hendre Felen M
Esgair Hir M,
Penybach M.
Llechwedd Helyg M.

Sulphur, native Card

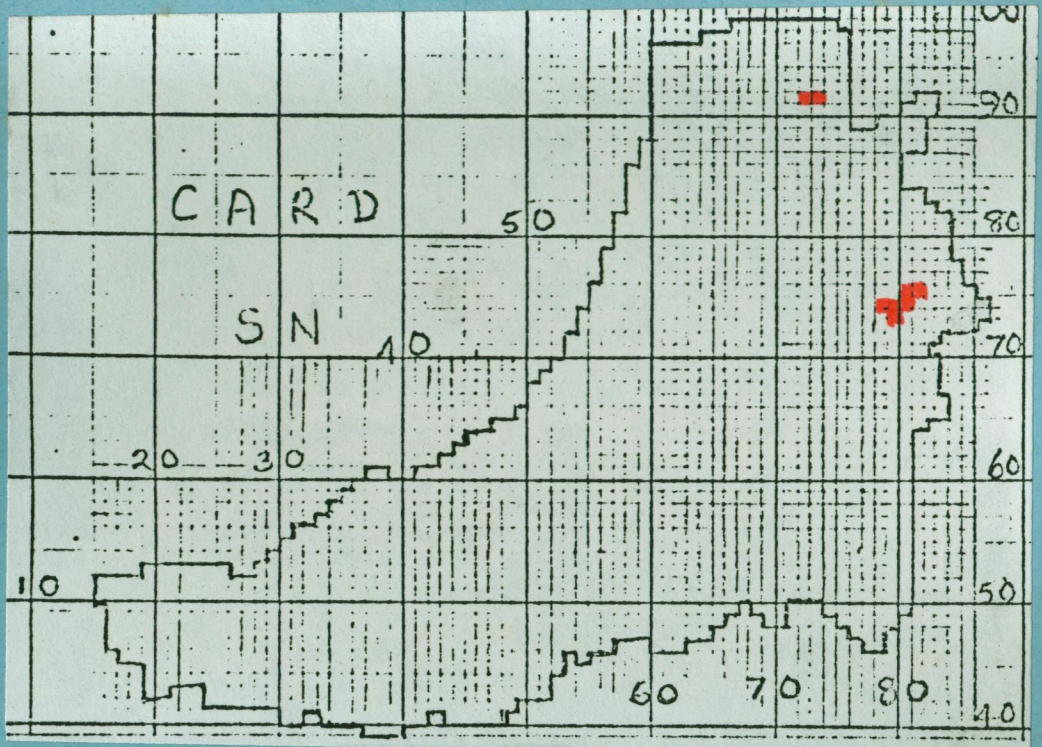
Esgair Hîr 7291 7391

Cwm Ystwyth { 7974 8074
8075 8175

Cwm Ystwyth W { 7874 7973
7974

Frongôch M

Pen Rhiw M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Susannite

Card

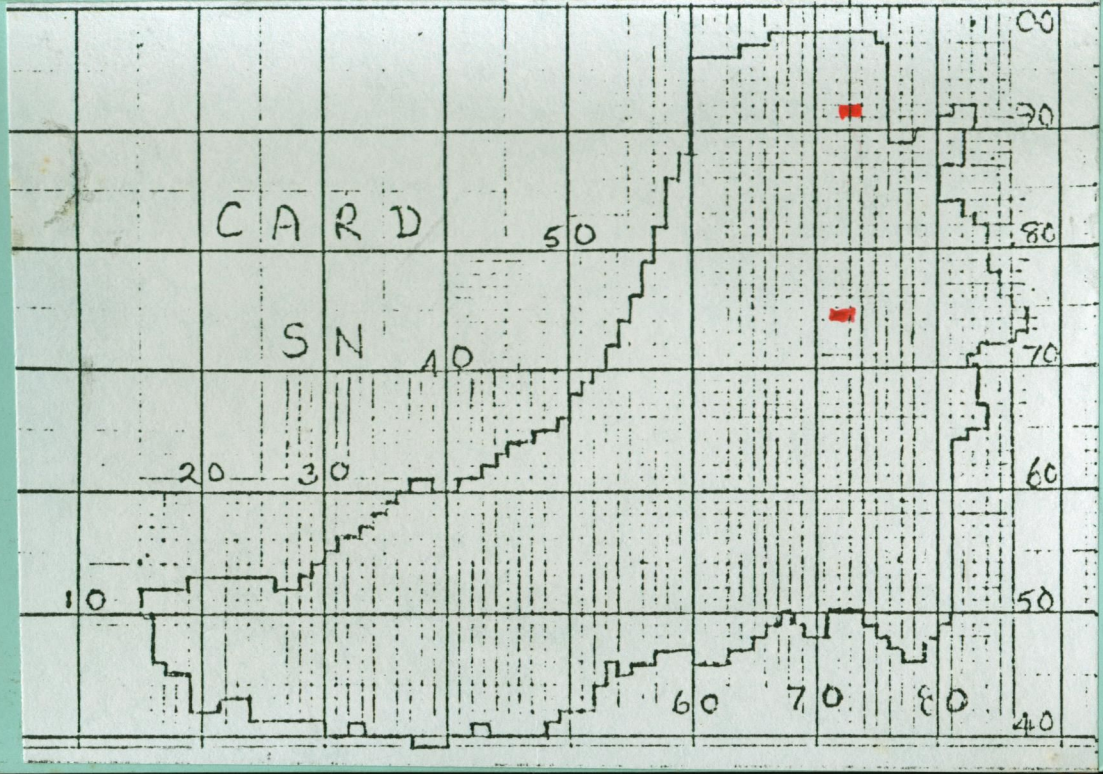
Esgair Hir 7291, 7391

Fron gôch 7174, 7274

Nant y cagal M(?)

Bwlch-glas M.

Hen Fwlch M[?]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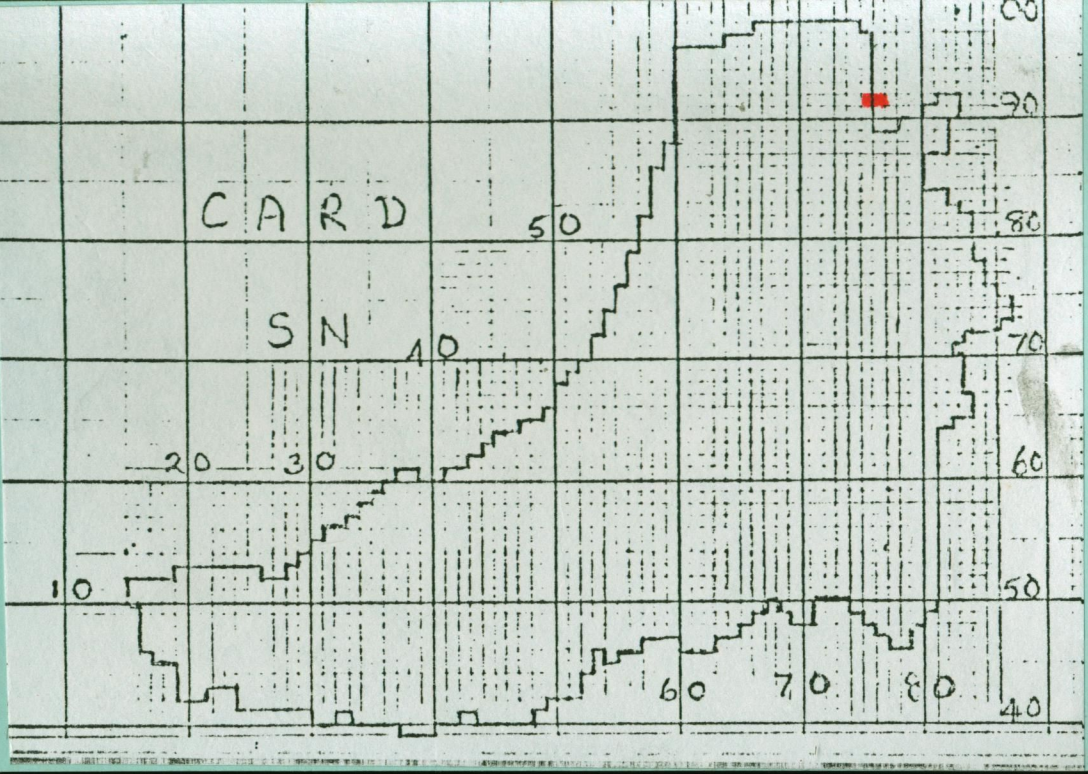
Tenorite

Card.

Esgair Hir 7291, 7391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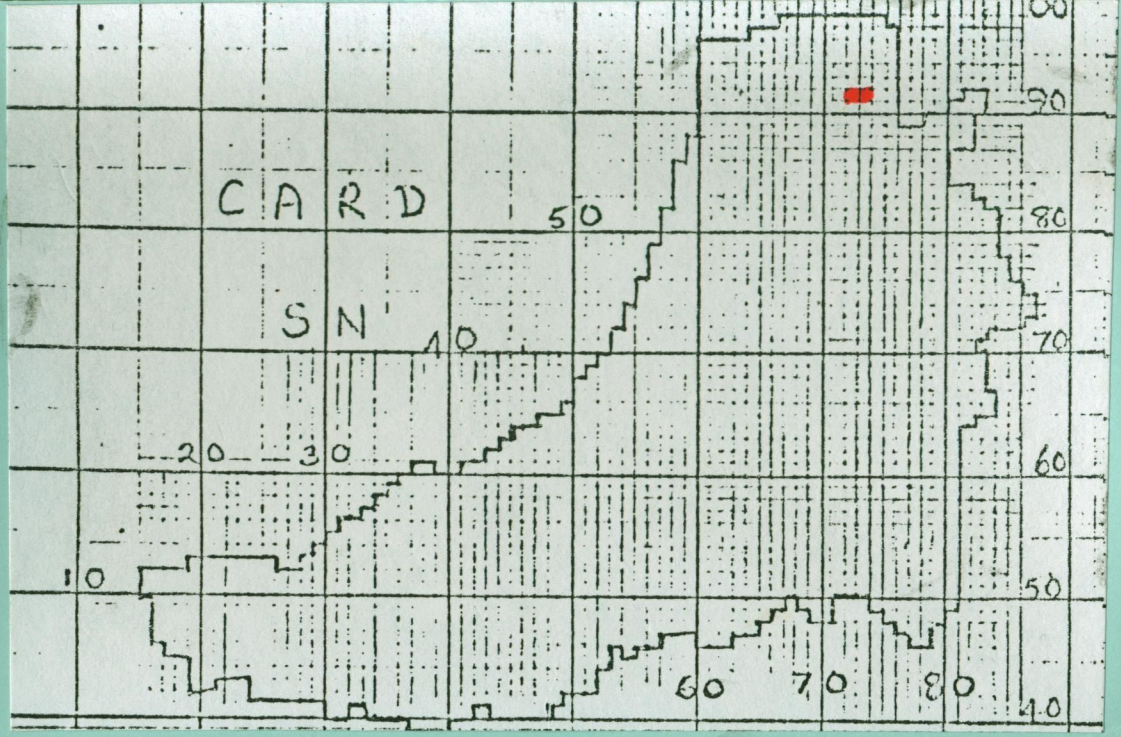
Tetrahedrite

Card

Esgair Hir, 7291, 7391

Gwaith-yr-Afon M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Tucekite

$Ni_9Sb_2S_8$ (tet.)

Nantycagal M

Card.

Tyrolite Card.

Gwaith-yr-Afon M

Ullmannite

Card

Esgair Hîr 7291, 7391

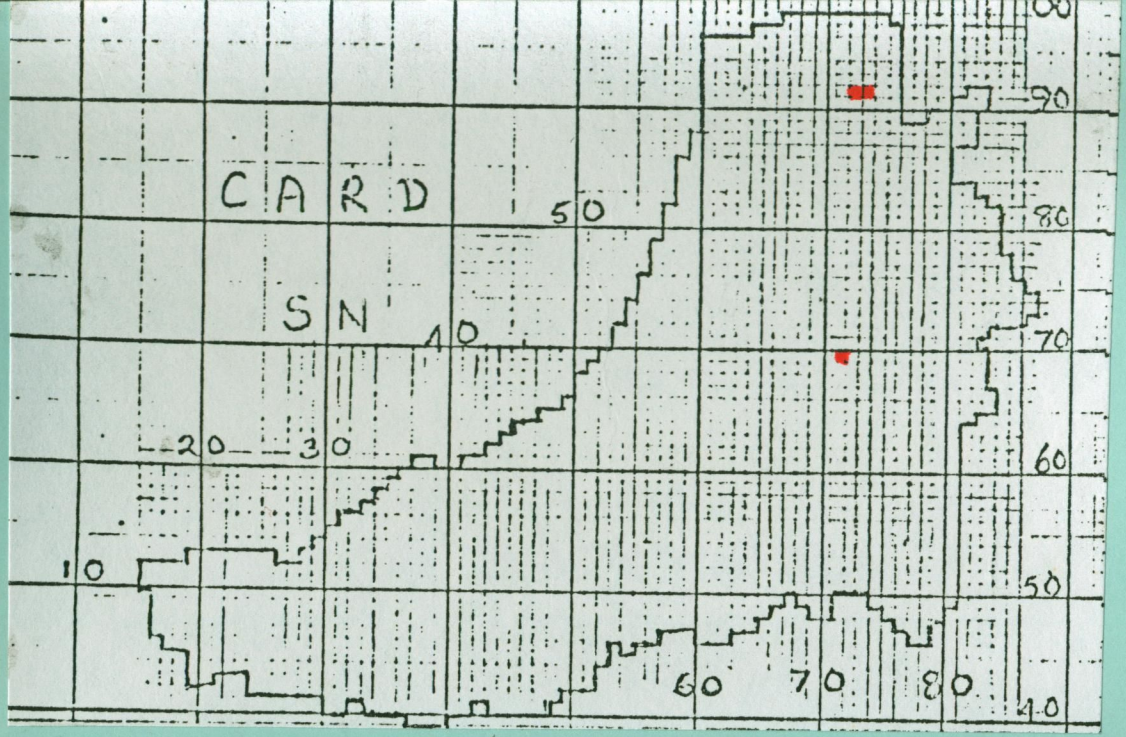
Hendrefelen 71 69

Ddclettwr M

Gwaith-yr-Afon M.

Frongôch M (?)

Elgar M 6586, 6686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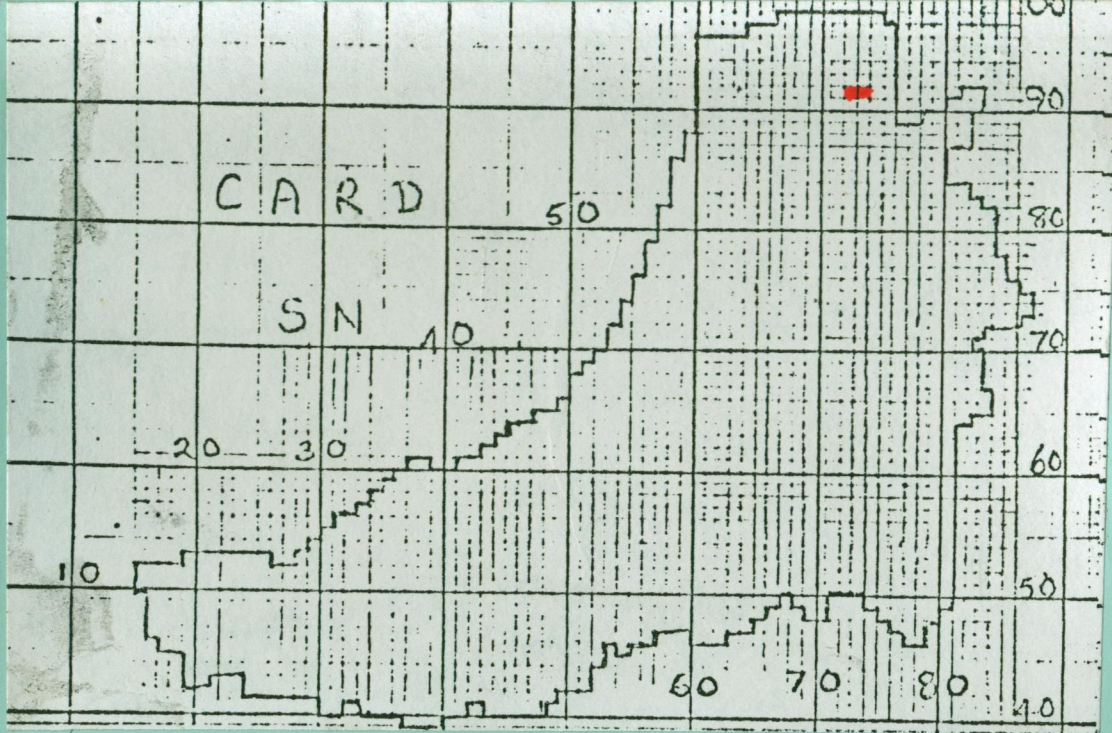
Violarite

Card

Esgair Hir 7291, 7391


CARD
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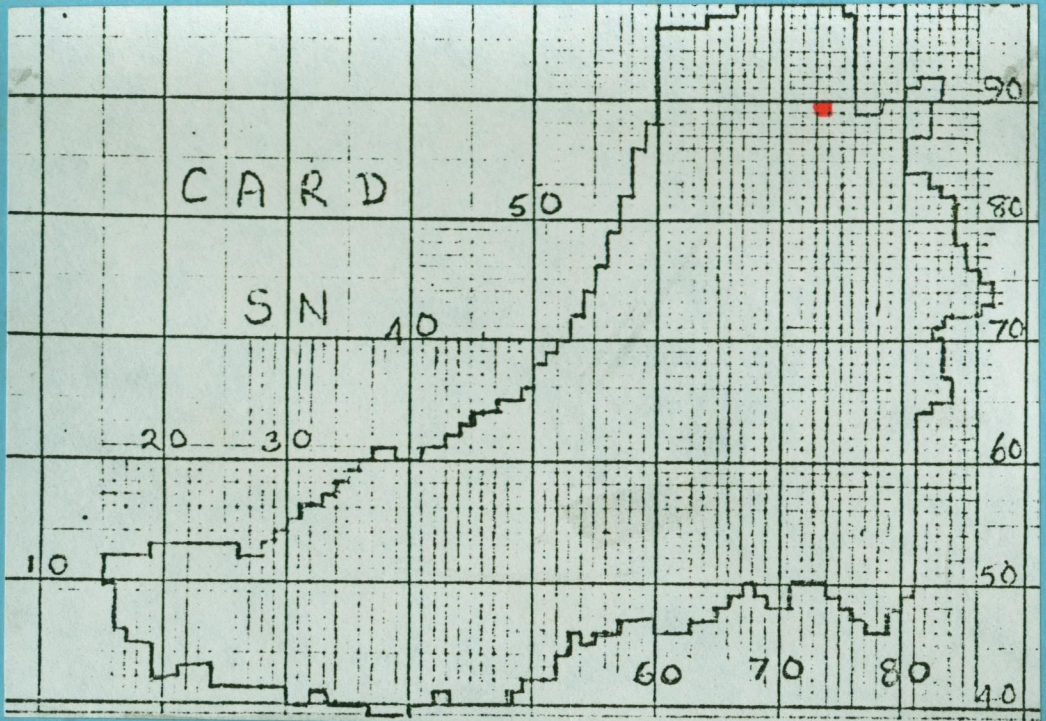
Woodwardite

Card

Nantycagal M 7389


CARD
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Wroewolfeuke

Card

Nanty cagal M 7389

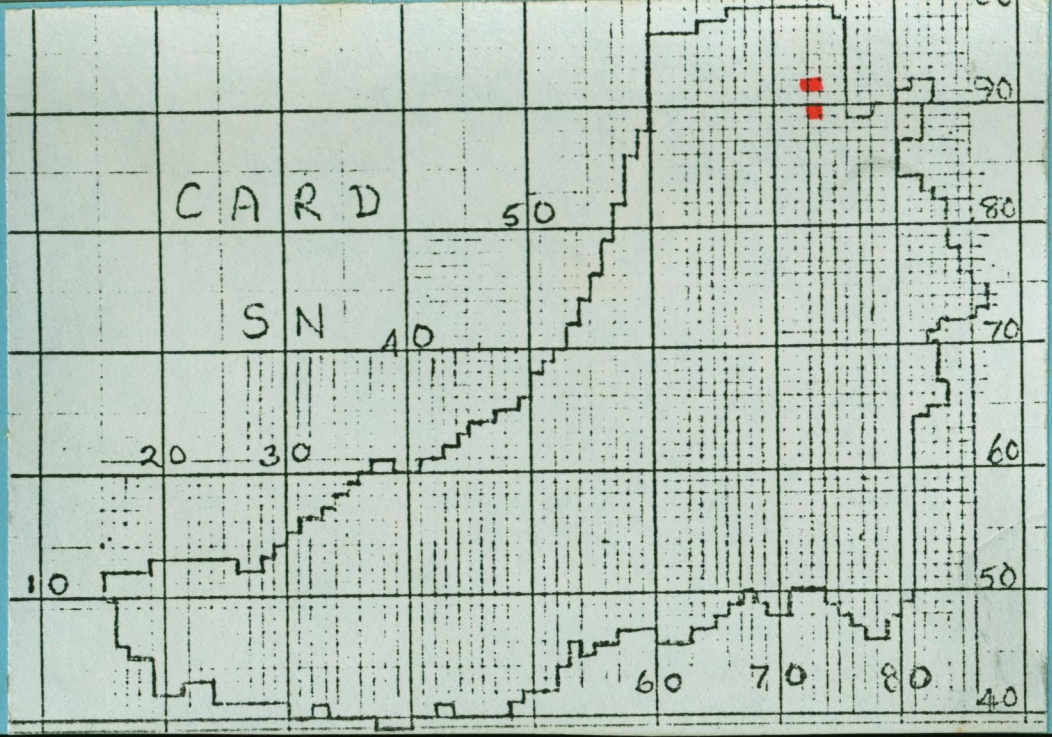
Cwm Ystwyth 8075

Esgeir Hîr 7291, 7391

Gwaith-yr-Afon M.

Frongôch M

Pen Rhiw M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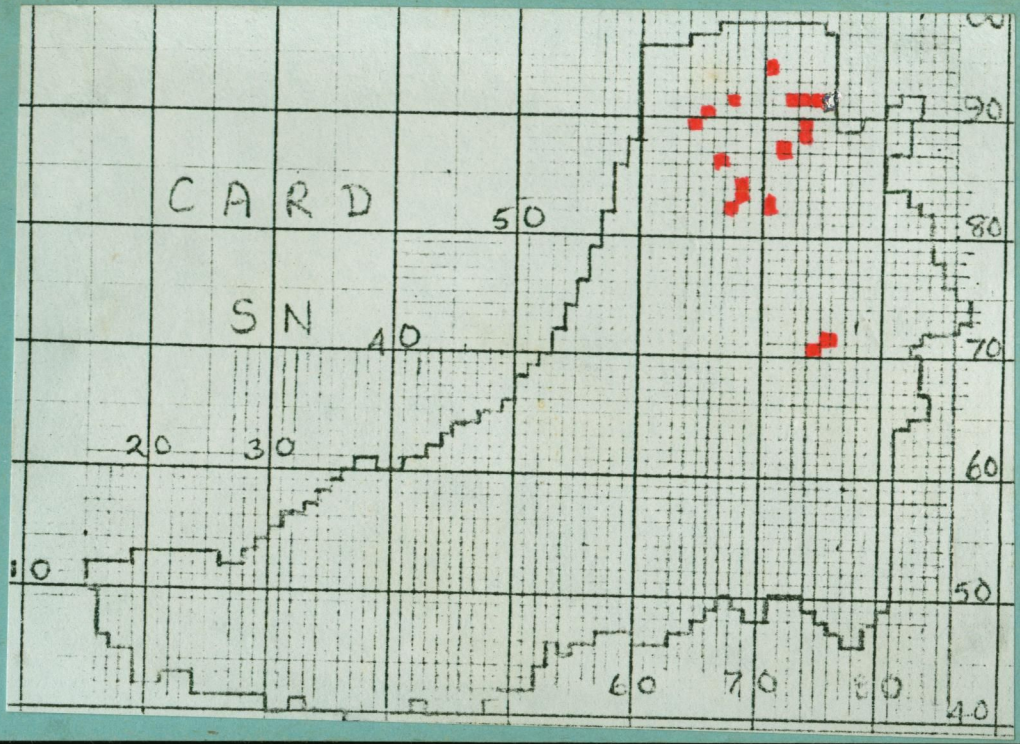
WULFENITE CARD

Bwlch-Glas M 7187
Esgair Hir 7291 7391
Glog Ms Fach 7470 7571
glog Fawr 7470 7571
Esgair Vraith 7491
Llechwedd Helyg 6984
Hafan M 7388
Allt-y-Crib 6589
Bwlch rhennaid M 7082
Cwmdaren M 6883
Daren M 6782
Hên Fwlch 7388
Mynydd Gordu 6686
Nantycagal M 7389
Pandy M. 6791
Pen y Banc 6590
Ystrad Einion M 7094
Elgar M. 6586, 6686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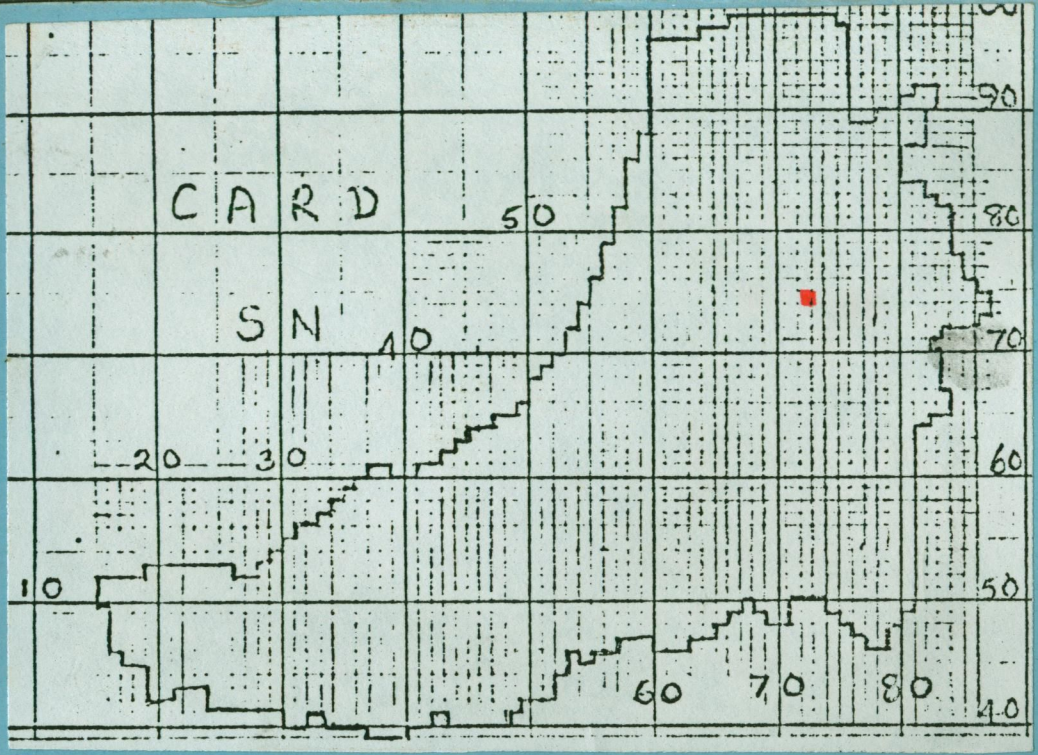
Unknown Cu, Pb(?), SO_4, CO_3 Card

From-Goch M 7274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1" 127 ~~Upper Gwnnws~~ SN ~~744 671~~

ABBEY CONSOLS MINE, ~~Upper Gwnnws~~, Card. 744 663

Upper Gwnnws

=FLORIDA MINE

See also BRON Y BERLLAN MINE

OTJ (1922) Pb, Zn. ①

p. 128. At one time, known as BRON BERLLAN [cf BRON Y BERLLAN of WWS (1848) from name of adjoining farm. ½ ⅓ ml NW of ruins of Strata Florida Abbey, on N side of Teifi valley Shaft, e adit (ca 690' OD). which drains mine to ca 25 fms. Adit ca 70 fms long longest level, (40 fm) only 90 fms long. Much blende assoc with the galena. (with some Ag). Worked 1848-1909 Not extensive

JRF-S (1979) 85. 744 663. Vein in Upper Fron. strikes a little N to E; of quartz with much sphalerite, some galena. Adit to N at 690 ft OD to cut vein 25 fm below surface. Main sh. on vein to 50 fm below adit. Workings for ~550' along strike. Originally called "BRONBERLLAN," before 1845. Reopened 1848, 1852, 1856–1861, 1877-82, 1886-91, 1893-8, 1905-9. 1236 tons Pb ore e 1765 tons Zn ore recorded. MJ many reports 1856–60.

DEB (1974, 1976) 1, 36. At 744 664. Sh's e opencasts; adit. Named "ABBEY CONSOLS" in 1856.

1" 127 SN 68$_6$ 78$_5$

ABER ~~F~~FFRWYD, Upper Llanbadarn y Creuddyn, Card

See also CWM RHEIDOL etc; ABERNANTM. GOTHIC M

WWS (1848) Not wkg (58) "ABER IFFRWYD"

OTJ (1922) ABERFFRWD (2) Pb/Cu.

pp 128+129 Several small workings near hamlet of Aberffrwd on S side of Rheidol valley. 2 adits near Vale of Rheidol Rly Stn & an old shaft. Several sh's near Abernant near S side of railway ½ mi SW of Aberffrwd.

JRF-S (1979) 57 ABERFFRWDD = ABERFFRWDD GOTHIC = GOTHIC [qv] = ABERFFRWDD AND BONSALL = E. ABERFFRWDD.

Vein ~ EW in Frongoch beds, worked by 2 crosscut levels to S from Rheidol Valley, near Aberffrwdd narrow-gauge rly. station. Shafts on vein. Working 1853-6. 236 tons lead ore, 5 tons Cu ore.

MJ (1853-1856) A few reports.

ABERIFFRWD, Upper Llanbadarn y Creuddyn, Card.

See ABER IFFRWYD 68 78

W. ABERFFRWDD, Upper Llanf.-y-Cr., Card.

See ABERNANT M. 6878

1"127 SN 680 785

ABERNANT MINE, Upper Llanfihangel-y-Creuddyn, Card.

See also ABER FFRWYD

JRF-S (1979) 56-57. ABERNANT = ABERNANT UNITED = W. ABERFFRWYD = W. SILVER BANK = TROED-RHIW-CEIR. NW vein in Frongoch beds tried by shafts along outcrop in Coed Llwest, mostly 1855-62. In 1855 Oddy's Sh 30 ft deep, Hughes' Sh. 63 ft. Vein said to be up to 10 ft wide of quartz cementing breccia, with spots of galena.

OTJ (1922) 129-30. Mentioned under ABER FFRWYD.

MJ. (1855 March-April; 1862).

1" 127 SN 766 770

ABER RHUDNANT, Up. Llanfihangel-y-Cr., Card.

JRF-S (1979) 64-65. Level S to a NE vein in upper Frongoch. 2 shafts on vein. No details known.

1" 127 ~~SN 738 788~~

ABERYSTWYTH MINES, Cwm Rheidol, Card.

See ~~BWLCHGWYN, NANTEOS~~ PENRHIW, NANT EOS, BWLCHGWYN

[NOT INDEXED]

OTJ (1922) (3) Pb/Zn p96 = PENRHIW and BWLCHGWYN ~~MINES~~ (=NANTEOS) MINES

JRF-S (1979) 62 = PENRHIW = NANTEOS and PENRHIW At times included TY'N-Y-FRON, YSTUMTUEN & CWM RHEIDOL.

1" 127

SN 661 898

AFON CEULAN, Ceulanymaesmawr, Card.

JRF-S (1979) 29. Level on NNE fault in lower Frongoch beds.

1" 127 SN 714 782

MINE & LODE

ALLT DDU, Upper Llanfihangel y Creuddyn, Card.

See also RHEIDOL UTD MINES.

WWS (1848) Not wkg (51)

OTJ (1922) 100-01 Part of RHEIDOL UTD. MINES. Two adits & a shaft. Deep adit at foot of slope near river. Driven W on lode ca 120 fms.

JRFS (1979) 58-59 ALLTDDU = GWAITHDDU = DANIEL'S = OLD NANTGLAS. Part of RHEIDOL UTD. NENE vein in Frongoch worked from levels driven SW from S side of Rheidol gorge both above & below level of railway line.

shallower parts said to have been richer.
A crosscut from GWAITHGOCH M. to below
older workings found little of value.
Richer in zinc ore than lead ore.
Active 1853-65.

WJL (1967) 180

1" 127 SN 638 880

ALLT GOCH, geneu'rglyn, Card.

JRFS (1979) 29 Trials in bottom Frongoch keds, prob for SSW contin. of fault-vein bounding Allt y crib lodes.

1"127 and Geneu'rglyn | SN 652 893 and 64 89

ALLT Y CRIB MINE, LODES, Ceulanymaesmawr, Card. (I)

See also TAL Y BONT MINES, TANYRALLT MINE, CWM LERI LODE.

WWS (1848). Mentions N. Lode (89), S. Lode (88), & three S branches (90-92). In Tal y bont mines (qv).

OTJ (1922) Pb/Zn/Cu ④. Tanyrallt mine associated. 53:4. Two N-dipping lodes. Galena, blende. Cwm LERI LODE, ½ ml below Talybont, crosses R. Leri. 3 adits from Alltycrib wood. Richest at top. p 23 Lodes. quartz; galena.

FJN (1962) 71-2 Had been worked by Bushell. Reopened 1830 with new high-level adit

WWS(1848) "The Talybont mines v. success. last century, but lately aband. from poverty in depth."

JRF-S(1979) 28-9 Centred on 648894.
Ancient, complex history.
Two main ~EW veins across Allt y caib Hill, in Frongoch. Cut off by X-vein or fault on W. Extensive workings from W of Talybont vill. to Llwyn adda. Hill stockwork-like, ore rich only in shallower part. Shafts & adits eg deep adit to W from W bank of Afon Leri at 655893 at ~170 ft OD. Worked to 20 fm below deep adit.

ALLT Y CRIB, Ceulanymaesmawr etc, Card (II)

LWYNADDA LEV driven in 17th Cent from W at ~ 350 ft OD (See W. ALLTYCRIB M.). Deep adit from Talybont driven ~ 1839 = CHAPEL LEVEL. Renamed "Middleton mines" 1854-6. Last worked 1914. Lead ore returned.

MJ (1850-65) (esp. 25/5/1850 with history details).

WJL (1967), 22, 54, 93, 95-6, 109.

PTO

DEB (1976) 3, 37.

(Rothwell & Mason (1992) UKJMM 11 30-40 Wulfenite (ident. vis.) recently as small orange bipyr. to 0.5 mm w. minor pyromorphite in gozan from an outcrop at SN 6532 8944 on side of a forest track close to old opencast workings. [S.A. Rust].

1" 127 SN 644 895

WEST ALLTYCRIB M., Genau'rglyn, Card.

See also ALLT Y CRIB M.

JRF-S (1979) 29 W workings of Alltycrib veins & W adit level.

= LLWYNADDA

ALMA MINE, Trefeirig, Card.

See LLECHWYDD HÊN 66 83

Upper Hanfihangel y Creuddyn

BELSHAZZAR LODE, Cwmystwyth, 1 Card.

See CWMYSTWYTH, and KINGSIDE WKG's.
SN 77, 87

BENDIGAID M., Caron-uwch-clawdd, Card.

See CARDIGAN S. BOG M. 73 65/66

1" 127 SN 662 892

BERTH-LLWYD, Ceulanymaesmawr, Card.

JRF-S (1979) 30 Trial level to N & E in Frongoch beds.

1" 127 SN 69 77 70

BLAEN CENNANT, Lower Llanfihangel y Creuddyn Card.

WWS (1848) NOT wkg (50)

OTJ (1922) (6) Pb/Zn p130 ca 3½ mls W of Devil's Bridge. Several shafts & shallow adits (900-1000' OD). Lead ore, blende ("BLAENCEUNANT")

JRF-S(1979) 58 BLAENCENNANT.
~ENE vein in Upper Frongoch. Mine at ~900 ftOD. Workings not v. extensive but fairly old, mainly from shafts. Reopened 1856 →→ 1870 Lead & zinc ores recorded

MJ (1856, 1863).

DEB [redacted] (1975) 2, 31.

1" 127 SN 716 905

BLAENCEULAN MINE, Ceulanymaesmawr, Card.

OTJ (1922) ⑤ Pb/Zn/Cu p. 130 An adit ca 1000' OD about 120 fm W to an engine-shaft. Workings limited to region of a rich bunch of lead ore with a consid. amt. of chalcopyrite & some blende. Also old sh. & an adit on a branch lode near Blaenceulan farm, but nothing to show any ore obtained. p21 Map: Descrip of lodes. Galena, siderite, chalcopyrite

JRF-S(1979) 19. Vein a little N of W; is N branch of Esgairhir vein. Shallow shafts ~1723. Deep adit, at ~890 ft OD started 1852, met vein at 250 ft., then on vein to W to Eng. Sh. ~720 ft from portal. Calcite with much chalcopyrite, sphale some galena. Closed ~1876.

MJ 1852-4.

WJL(1967) 95

DEB(1976) 3, 36.

RSN (1994) The nearby Blaen Ceullan mine was also visited but found to be completely barren of ore minerals.

BLAENCELNANT M., Up. Llanb.-y-Cr., Card

See BLAENCENNANT M. 69 77

1"127 SN 827? 755?

BLAENCWM & WEST BL.M., Up.Ll.-y-Cr., Card.
See also CWMYSTWYTH M's.

SJSH (1981) 67. BLAENCWM M, very small, & WEST BLAENCWM, even smaller; to E of CWM YSTWYTH M's. Locally called "GWAITH CWM GROT". Merely mentioned by A Francis on p 101. "History of the Cardigans. Mines (1874)

OS 2½" map has "Blaen-y-cwm" at 854 757 near Montgom. border and at 827 755 (more likely)

1" 127 SN 70 84

BLAENCWMSYMLOG MINE, Trefeirig, Card.

See also DAREN E.M; CWM SYMLOG W & N M's.

WJL (1967), Map p 170 labels "BLAENCWMSYMLOG" a mine just NE of "CWMSYMLOG" (& Daren E)

BLAENDYFFRYN MINE, Melindwr, Card.

See SILVER STREAM MINE 70 81

1" 127 SN 733 930

BLAENEINION, Ysgubor-y-coed, Card.

JRF-S (1979) 18: Level (trial) to E at base of Frongoch form'n.

OS 2½" map shows "Old level" at 733930.

1" 127 SN 75 9 76 9

BODCOLL MINE {Upper Hanfi hangel / y Creuddyn} Card.

=GERTRUDE MINE

WWS (1848): N&T wkg. A fine lode with promising appearances of galena. (44)

OTJ (1922) (7) Pb. p131 Near R. Mynach, ca 1½ mi E of Devils Bridge. Lode a considerable width of shattered country rocks with quartz and gossan. One drawn through well-arched adit (ca 800'OD) measuring 10'x8', to a shaft on the lode. Lead ore.

RSWB (5/68) V, 115. Thin coatings pyromorphite and cerussite on shale

JRFS(1979)65 BODCOLL = GERTRUDE = SOUTH WALES M.

Vein tested to NE right across Bodcoll Hill, from lowest level on W side at 757 763 to main workings on E side at 759 769, where plant erected.

Vein was called Frongoch Vein; in Frongoch. Levels both sides of hill, shafts on vein, main shaft from a level in from the NE.

Worked by South Wales Mining Co 1850-~~57~~. Closed 1855. Working 1870-73. Main oreshoot rich but cut off in depth. Lead ore only raised but zinc ore common.

MJ (1850-59)

DEB(1975), 2, 30.

1" 127 SH 739 814

BOG MINE, Cwmrheidol Card.

=CRAIGNANT BACH MINE. | See also GOGERDDAN; DAREN.
HENFWLCH.

WWS (1848) with DAREN MINE (qv) worked as the GOGERDDAN MINES (qv) (67)

OTJ (1922) (8) Pb/Zn. p88-8 3/4 ml WNW of Ponterwyd. At one time worked with DAREN & some others as GOGGERDAN MINES.
Lead ore; blende

WJL (1967) 170, 193.

MJ (1852 onward).

DEB (1975) 2, 13, 16, 18

JRF-S (1979) 54-5 BOG = CRAIGNANTBACH 739 814.
Part of LLYWERNOG = PONTERWYD M's complex, with several veins in lower Frongoch. Worked for lead & zinc ores, 19th Cent.

Levels, lowest at 800 ft OD to W. from Afon Rheidol; shafts on Mynydd Pont-erwyd. Main vein S & E, crosses NE vein from Llywernog M.

1" 127 SN 650 917

NEW BOG MINE, Llangynfelyn, Card

See also TREFRIDDOL; LLANCYNFELYN; DOLCLETTWR

OTJ (1922) 147. TREDDOL or NEW BOG M (78)
Pb mine (6 tons, 1887). Not known which mine near Tre'ddol this is. Lead ore.

JRFS (1979) 25. Shaft in Frongoch rocks at S end of LLANCYNFELIN M. in 1887, 6 tons Pb ore produced.

WWS (1848) working mine No 103 [which places it just S of LLANCYNFELIN M] "TRE'R DDOL MINE." A rich lode of chalcopyrite

D C Davies (1888) TRE*R DDOL [=this or DOLCLETTWR ?]. The galena has not much Ag; a little sphalerite; a good mass of chalcopyrite was found

BONSALL, Upper Llanf-y-Cr., Card.

See ABERFFRWYD 68 78

BONSALL'S LEVEL, Cwm Ystwyth, Card.

See CWM YSTWYTH M'S.

1" 127 SN 747 759

BRIGNANT (CONSOLS) M., Up. Llanfih.-y-Cr., Card.

JRF-S (1979) 66 BRIGNANT = BRIGNANT CONSOLS.
Trials nr. Brignant-isaf for NE contin. of Frongoch V., made 1852-55. Puts e shafts e x-cut level from near farm. Vein 9ft wide, in Frongoch, much quartz e calcite but little ore. MJ (1852-5)

1" 127 SN 751 754

BRIGNANT UCHAF, Up. Llanfih.-y-Creuddyn, Card.

JRF-S(1979)66 Trials on NE vein in Frongoch beds. No records.

BRIWNANT M., Up. Llanf.-y-Cr., Card.

See ~~PENTRE (BRIWNANT)~~ CWMYSTWYTH WEST Ms
7874

BRON BERLLAN MINE, Upper Gwnnws, Card.

See ABBEY CONSOLS MINE. 74 66

cf. BRON-Y-BERLLAN.

1" 127 SN 69e 69s Card

BRON CARADOC

OTJ (1922), 33: Adits driven E on lode (probably LOGAULAS lode) below Bron Caradoc, cut, according to A. Francis, two lodes one supposed to be Glogfach lode (unlikely). Cu & Pb ones at junction & elsewhere in the adits on the lodes.

W of Logaulas.

1" 127 SN 66 83 4

BRONFLOYD MINE, Trefeirig, Card.

See also LLECHWYDD HÊN

OTJ (1922) (9) Pb/Cu p62: "Bronfloyd" is a corruption of Bryn Llwyd. On S slope of Nant Silo. A very old mine, probably worked by Sir Hugh Middleton cg 1600, certainly before 1645. Quartz, galena, copper ore.
p27-8: Lodes pp 62-4

J.G. Raybould, PhD Thesis, Aber., (1973), 66.
Quartz-ankerite gangue. Chalcopyrite, pyrite, covelline, uncommon; galena, with a very few 10 μ grains of arsenopyrite inclusions.
Cerussite common on walls of drift & adit, near 659 833

JRF-S(1979)40-41. BRYN-LLWYD = BRONFLOYD.
W end of (NE) Camdwr V. in Frongoch - a set of 11 branches. Breccia cemented by quartz with spots & strings of ores. Worked c1600 by Sir Hugh Middleton & by Thomas Bushell c1640-5. Closed 1892.
Old Adit Level, 280 ft OD, portal 653 837 beside Nant silo.
New Adit Level, 305 ft OD, from 661836 shorter & more econom.
No's 1, 2, 3 Sh's.
Lead & copper ores produced.
MJ (1850 et seq)
WJL (1967) 96, 184, 188
DEB (1976), 3, 26

BRONFLOYD EAST, Trefeirig, Card.

See LLECHWEDD HÊN 66 83

BRONGWYN, Caron-uwch-clawdd, Card.

See BRON MWYN. 7164

1" 127 SN 714 644

BRON MWYN, Caron-Uwch-Clawdd, Card.

WWS (1848) (7) "worked 40 years ago"

JRF-S (1979) 86. 714 644. EW vein in Up. Fron., tried by sh's to E of B4343 road, No records but @ 244 tons lead ore recorded from "BRON GWYN" in MJ betw 1854-6

WJ Hughes in N-F (1959), 290. OTJones notes lode at Bronmwyn 2mle S of Strata Florida

1" 127. SN 7 6

BRON Y BER-LLAN Upper Gwnnws(?) Card

See also BRON Y BER-LLAN NORTH LODE, ABBEY CONSOLS [?=]

WWS (1848) ⑨ "Working on small scale"

1" 127 SN 7 6

BRON Y BER-LLAN, NORTH LODE, Upper Gwnnws(?) Card.

See also BRON Y BER-LLAN

WWS (1848) (10)

BRON-Y-GOCH MINE, Upper Llanfihangel y Creuddyn Card.

See FRON GOCH MINE 7174, 7274

BRUNONT (=BRUNANT) M., Up. Llanf.-y-Cr., Card.

See RENTRE (BRUNANT) M.

See CWMYSTWYTH WEST M's #7874

1" 127 SN 727 963

BRWYNO, Ysgubor-y-Coed, Card.

OS 2½" map shows "Old shaft" at SN 727 963 high up e remote, at the head of the Brwyno valley.

JRF-S (1979) 17. BRWYNO-UCHAF; unsucc. trial shaft.

1" 140 SN 744 508
745 509

BRYN-AMBOR, Llandewi Brefi, Cardigans.

OS 2½" map shows "Lead Mine (Disused)" at SN 744 508, at Bryn-ambor.

WJL (1967) Map p237. Lead mine

GWH (1971) 71-73. At 745 509. Reworked 1860-3, 1870-4. History, descrip.
Main Lode, NE, 15-20 ft, dip NW width highly polished slickenside on both walls

Lead ore in branches across lode, instead of ll^r to it. Lode frequently rugby, with country rock, quartz, calcite, pyrite, galena, copper ore, & occas. fluorspar & barytes.
Dumps washed away.

JRFS(1979) 88. Vein NNE in Silurian. Old; reopened 1860-3. In 1861 at 20 fm level vein 14 ft wide, of calcite, fluorspar & clay. Restarted 1870, finally closed 1874, having reached 34 fm at engine sh.

MJ 1862-3, 1870-4

7450

1" 127 SN 664 915

BRYNARIAN MINE, Llangynfelyn, Card.

~~PENSARN~~ See also PENSARN MINE; TRE'R DDOL TAL-Y-BONT, "TALIESIN", LLANCYNFELYN M.

OTJ (1922) (10) Pb/Zn. Brynarian and Pensarn.

p 131 On group of small lodes on steep slope E of Taliesin or (Tre-Taliesin). PENSARN mine ca 600 yds to SE, worked mainly from shafts at ca 600'OD, & partly drained by adit, lowest about 240'OD. Lead ore, blende

DC Davies (1888). The galena has not much silver; a little sphalerite; some chalcopyrite

JRF-S(1979) 26-27. Worked small V's in Lower Frongoch on W slope of ride just E of Tre-Taliesin, in conjunct. w. PENSARN M. V's E-W & NNE, of Quartz cementing breccia, with lead, zinc & copper ores. Deep adit level at 240 ft OD. Closed 1853

MJ (1850-53)

DEB (1976) 3, 40 BRYNARIAN = CARDIGAN BAY CONSOLS

SA Rust UKJMM (1992) 11 Ramsbeckite

BRYNARIAN M

1" 127 SN 761 695

BRYN CORYN, Upper Cwmnws, Card.

JRF-S (1979) 83 Trial shaft to explore for NE. extension of Esgairmwyn vein. No details known

BRYNCRACH M., Caron-uwch-clawdd, Card.

See CARDIGAN S. BOG M. 7365, 7366

1" 127 SN 687 938

BRYNDYFI MINE, Ysgubor-y-coed, Card.
= NEUADDLWYD MINE
See also LLWYN GWYN [probably =]

OTJ (1922) (11) Pb. p131 Ca Ime S of Furnace, Glandovey.
Considerable trials on fault, NW-SE. Only
24 tons lead ore were sold (1882).

JRF-S (1979) 23 Several trial levels and a
shaft on a NW vein in Gwestyn e Van rocks.
Some lead ore produced 1882.

WJL (1967) 188

DEB (1976) 3. 43

1" 127 SN 760 816 758 816

BRYN GLAS MINE Cwmrheidol Card

WWS (1848) (61) "wkg". Lode working also at Esgairlly, (qv) with cross strings, on a small scale

OTJ (1922) (12) Pb p132 On main road 3/4 mle E of Ponterwyd. Shaft by roadside, adit under road (ca 785'OD) to NE & trials higher up. One lode exposed in bed of R. Castell, other ranges towards the school. Lead one returned for 2 yrs only, ca 1860

JRF-S (1979) 55 BRYNGLAS; SN 758 816

Several small NE veins in Upper Van. Level from side of main road at 785 ft OD & shafts & levels further NE nr Brynglas farm. Produced lead ore 1857-1860

DE Brck (1975) 2.12.

BRYNHOPE M., Caron-uwch-clawdd, Card.

See CARON M. 7265

BRYN LLWYD MINE, Trefeirig, Card.

See BRONFLOYD MINE 6683

1"127 ~SN 583 637

BRYN MELYN, Upper Llanbadarn-Trefeglwys, Card.

cf BRYN MELYN, Ysgubor-y-coed, SN 735 925

JRF-S (1979) 82 Trial for lead ore near 583 637 at unspecified date, unsuccessful; vein said to be EW in Cwmystwyth formation.

1" 127 SN 735925

BRYN MELYN, Ysgubor-y-coed Card.

cf BRYN MELYN, Upper Llanbadarn-Trefeglwys (SN 583637)

OS 2½" map show "Old Level" at SN 733 930 (BLAENEINION) and "Level" at SN 735 925, high on Bryn Melyn, remote from tracks.

JRF-S (1979) 18. Trial level low in Frongoch form'n.

1" 127 SN 698 822

BRYN PICA MINE, Melindwr Card.

See also GOGINAN; BWLCH.

OTJ (1922) 78-9. An old mine, in E part of GOGINAN MINE

JRF-S (1979) 42. On Goginan V., latterly part of GOGINAN Ms. [qv]

1"127 SN 7 6 ?

BRYN Y GORS, ? Caron-Uwch-Clawdd, Carol.

WWS (1848) ⑧ "Trials lately made"

BRYNYRAFR MINE, Trefeirig, 1" 127 SN 746 879 Card (I)

See also CAMDWR

OTJ (1922) (13) Pb/Zn p. 55. Section. In Van rocks. & plate X

Blende, galena, pyrite, marcasite p24.

GR, GS (4/66) Shale dumps, with honeycombed & massive quartz & much fine-grained & massive pyrite; occasional galena & sphalerite; rare crusts hydrozincite.

JRF-S (1979) 47. SN 745 879. Vein a little S of E in Van formn. — branch of HAFAN V? In core of anticline. Sphalerite, galena,

much pyrite. Adit level at 15 fm
in main sh., on V. Worked 1881-1912
Zinc & lead ores returned.

WJL (1967) 192-3, 284

DEB (1976), 3, 52.

R Starkey (1998) BMSN 50, p 12. Millerite
found by S. Rust, 1993. Bevins (1994),"
gives "crystals occasionally to 2 cm
RSN (1998) 33, 18. Sphal; qtz; marcasite

BRYNYRAFR M, Trefeirig, Card. (II)

S. Rust BMSN (2004) 67, 2-3. "Alpine clefts in mid-Wales". Albite, apatite, quartz, muscovite, rutile

BRYN-YR-ARIAN MINE, Llancynfelyn, Card

See BRYNARIAN MINE 66 91

BRYNYSTWYTH MINE, Llanafan, Card.

See GROGWYNION 71 72

1"127 SN 712 797

BWADRAIN MINE. Cwmrheidol Card

See also BWADRAIN S.; GELLI'R EIRIN MINE; CWM RHEIDOL etc

OTJ (1922) (14) Pb/Zn. p90-1 ca. 3/4 ml S of Cwmbrwyno & ca ½ ml N of the Rheidol valley. Only approach by cart-track from main road to Aberystwyth, near Cwmbrwyno mine - a distance of ca 1 mile. Shafts on a peat-flat ca 900'OD, waterwheel in Rheidol valley below. Much blende, lead ore. Lode supposed to continue into GELLI'R EIRIN MINE, qv. The lode outcrops near "the Stag" on slope of Coed

Dolfawr (The "Stag" is dump-stuff).

JRF-S(1979)60. Vein strikes ENE from Gelli Reirin M. & swings to EW at Bwadrain where joined by a branch & vein tried at Tyllwyd; all in Frongoch beds.

Late development, shafts only. Main vein rich in sphalerite but almost no zinc ore produced, so much remains on dumps & underground. Working 1867–1876 – 1744 tons Pb ore & 5 tons Zn ore sold.

DEB(1975)2, 21.

1" 127 SN 713 788

BWADRAIN S. MINE Cwmrheidol Card

See also BWADRAIN MINE; CWMRHEIDOL etc.

OTJ (1922) Included with Bwadrain mine

p. 132 Shaft & adit on SIMDDELWYD LODE E of Nant Bwadrain & ca ½ mi SE of Bwadrain mine. 3 tons blende only (1876)

JRF-S(1979) 60-61. SOUTH BWADRAIN, 713 788

Level & shaft on v ENE Simddelwyd vein in Frongoch; tried 1876. 3 tons Zn ore sold.

BWLCH CONSOLS, Tirymynach, Card.

See BWLCH M., LEVEL NEWYDD.
70 82

Tirymynach 1"127 SN 70 3 82 3

BWLCH MINE, ~~Trefeirig~~, Card. (I)

See also BWLCH CWMERFIN; CWMERFIN; GOGINAN M's. BWLCHRHENNAID; CAE NANT; LEVEL NEWYDD

OTJ (1922) (15) Pb/Zn p79 = BWLCH CWMERFIN; BWLCH CONSOLS or (with BWLCHRHENNAID) BWLCH UNITED. Referred to by Waller (1698 or 1700?) as "CWMERFIN MINE" [but NOT = CWMERFIN MINE (qv).

GOGINAN MINE is to W, CEUNANT (=CAE NANT) to E. Lead ore

BWB (8/65) V 3 No recent mins. Shale, with galena, quartz, etc

GR et al (6/65). Big shale dumps around

SN 701823. Quartz, sphalerite; galena; 1 spec. weathered hemimorphite +ls on sphalerite.

WWS (1848) "Working". ~~Erasmus~~ "BWLCH CWM ERFIN MINE". Shown as though one lode, (71) is GOGINAN S. LODE & there are also two south lodes (72), (73).

JRF-S (1979), 51. Ancient. Active 17th Cent., NE vein in lower Frongoch developed to SW from head of Cwm-erfin; adit from S side of valley at 770 ft OD, where opencut; shaft later to 70 fm below adit. The SOUTH or BWLCHRHENNAID V. also worked from here, but mainly from LEVEL NEWYDD, sometimes

BWLCH MINE, Tirymynach, Card. (II)

combined together.

DEB (1975) 2, 38

BWLCH (CWM ERFIN) MINE, Trefeirig, Card.

See also CAE NANT; BWLCH; CWM ERFIN M.

WWS (1848) "working." Shown as though one lode (71), is GOGINAN SOUTH LODE (qv) and there are also two south lodes (72) (73).

OTJ (1922) = BWLCH MINE, (qv)

1" 127 SN 710 875

BWLCHGLAS MINE (Eulanymaesmawr, Card 7087 7187) (I) 709 878

See also HAFAN MINE,

OTJ (1922) (16) Pb/Zn p 57÷9. On S slope of Clwm Tynant valley nr Talybont. Galena, quartz.
The HAFAN LODE occurs in the mine.
In the top adit, ca. 25 fms W of the W shaft, a strong, almost vertical gozzany lode cut, ranging E 30° N, of cavernous quartzose breccia. Blende,
25: Coarsely xlised vein quartz

PT, Priv Comm (1968): Pyromorphite; good bipyramidal wulfenite to 3mm; cerussite, on dumps of ~850 ft OD level. Pyromorphite then

found in the adit - paler underground [cf. Burgam]
From dumps a nice bipy. wulf with cerussite
e 2 gener's pyro:- ① Pyro ② wulf ③ Pyrom.

RSWB ePT (1/69). Dumps as above also anglesite in galena. In adit good pyro. on quartz stalactitic coatings cerussite (IR). Traces cinnabar (heated → Hg condensate) in red limonitic gozzan under pyromorphite.

RSWB ePT (10/72). Superb pyromorphite on quartz xls found in breccia ~~chim~~ pipe, occas spotted with oily bitumen.

RSWB ePT (7/73). Hemimorphite good but weathered sheaves; also very pale yellow smear of ? greenockite or hawleyite on sphalerite from lower level (c 680 ft OD)

BWLCH GLAS MINE, Ceerlanymaesmawr, Card. (II)

JRF-S (1979) EVANS's & MAIN V's, N & E, in lower Frongoch, worked; fractures acs. w HAFAN or DISTRICT V. system which is barren in the mine area. The worked V's are & numerous joints in fractured ground with ribs of clean galena in quartz.

X-cut levels to & & sh's on V's both E & W of X-cuts. Working 1882, 1887, 1909-11, 1913-16. Lead & zinc ores returned.

WJL (1967) 193, 340

DEB(1976), ~~3~~, 34.

OS 2½" map has "Old Level" to E also, at 716 878

R.P. Shaw (1982) Bull. Pk. Dist. M.H.S. 8, 187-192
"Bwlch Glas lead mine, Cardiganshire" Hist. descrip. plan & section. Discov. late 1870's
Active/ intermitt → 1920's
Lodes "DISTRICT" (= HAFAN) here unproductive;
EVAN'S (small stopes betw Upper Adit lev. & surface);
MAIN LODE (worked ~100 m length & 110 m depth);
up to 2ft wide.

BWLCHGLAS MINE, Ceulanymaesmawr, Card. (III)

Fault breccia of shale cemented by quartz, calcite; galena; sphalerite; some baryte on tips. Pyromorphite in vuggy quartz vein in Upper Adit, "recently" worked out by mineral dealers".

RSWB. Min. Record (1982)[3]151-153. "Pyromorph., wulf. and other mins from the Bwlch-Glas mine, Cent. Wales"
Descrip, mineralogy; illustr in colour.
Greenockite, sphalerite, galena, chalcopyrite, quartz, cinnabar (new to Wales); pyromorphite (details; IR normal, AsO_4 free); ceruss (details); anglesite;

wulfenite (details); hemimorphite.

RP Shaw "Bwlch Glas lead mine, Cardigs." Bull PDMHS (1982) 8 [3], 187-192
History, indust. archae. Plan, section. Fault breccia & shale with quartz, calcite, galena, sphalerite. Baryte on tips. Pyromorphite in Upper Adit Level.

GB

Welsh Weekend: 21-22 August 1993
(leader Steve Plant)

Saturday 21 August RSN (1994) 24

Nine members met at the Bwlch Glas mine near Talybont. Reasonable specimens of green microcrystalline pyromorphite were found without much difficulty near the middle adit dumps. Bipyramidal wulfenites to 1mm were also noted.

BWLCHGLAS MINE, Ceulanymaesmawr, Card. (IV)

J. Betterton et al (1996) "Mineral notes" UKJMM 17, 17-18.

Susannite & caledonite ~~from~~ on brecciated galena-sphal-qtz veinstone in the upper part of the orebody.

RSN(1999) 35, 19. Upper adit u'g'd trip.- in lower sub-level pyrom, cerussite, anglesite, bipyr, wulfenite. ?Susannite between galena & pyrom. (H. Critchley). Thanks to ~~Dr~~ Bernard More for permiss.

RSN(2000) 37, 19. Pyro, wulf, "a nice group of susannite x/s" underground

RSN('03) 42 27. Visit (premises owner Bernard Moore)
Nothing new

S. Rusk (2009) Letter in Message Board Mindat 20/8/09
. steverustite in situ from the vein in Bwlch Glas shallow adit. X/s not as good as those from Fron-goch mine for analysis: MA Cooper et al (2009), MM, 73, 235-250:-
17 samples

1" 127 SN 738 787

BWLCHGWYN MINE, Cwmrheidol, Card. 739 789

See also ~~ABERYSTWYTH MINE~~ PENRHIW, NANT EOS etc.

OTJ (1922) Pb = NANTEOS MINE [qv]

JRF-S (1979) 62) = NANTEOS CONSOLS. At 738787 Not = NANTEOS (at 737786) but worked with it at times. On ~N of E → EW Castell V. in Frongoch. Worked mainly from a shaft to 50 fms. Lower parts poorer. Active 1839-82 with & without PENRHIW. At times worked also with TY'N-Y-FRON, YSTUMTUEN & CWM RHEIDOL at times as "ABERYSTWYTH M'S".

7378

JG Raybould, PhD Thesis Aber (1973). BWLCHGWYN MINE - shaft 250m ENE of Penrhiw Stn. [i.e. near 739 789]. Much marcasite; quartz; sphalerite; ankerite; galena; chalco-pyrite, much altered to malachite.

Marcasite not common on E shaft tips. Much sphalerite, good galena-octahedra to 1·5 cm on sphalerite.

WJL (1967), 111-2, 173, 176.

DEB (1975), 2, 25 At 739 789. In 1870 working with PEN RHIW as NANTEOS CONSOLS.

1" 127 SN 706 823

BWLCHRHENNAID MINE, Trefeirig, Card.
See also BWLCH MINE; LEVEL NEWYDD.

OTJ (1922) 80 Small mine worked by a shaft on the LEVEL NEWYDD lode, ca 1700. Returns are coupled with those of BWLCH MINE

JRFS (1979) 51 = LEVEL NEWYDD, qv.

Max M Wirth Priv Comm 24/7/87
Caledonite, ident. microchemically.

S. Rust (Coll. 1987) Bindheimite (XRD, BM(NH))

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite [ident. vis.] on shaft dump at 7060 8228; small yell-orange, tab. xls, rarely to 1.5mm on microxline hemimorphite coating cav's in brecc'd brown mudstone (Cooper, 1987). Also azurite, sparkling crusts of xls to 0.5mm with malachite on brown mudstone

S. Rust (1986) BMS Newsl. 18

RSN (1994) 24

After lunch, the party moved to Bwlchyrennaid mine near Goginan. Examination of the surface dumps yielded good microcrystalline linarite with one spray to 10mm (azurite has also been reported from here!) Some fine crystalline malachite was found and cerussite was fairly common.

BWLCH UNITED, Tirymynach, Card.

See BWLCH M. & LEVEL NEWYDD 7082

1" 127 SN 704 701

BWLCH Y BAEDD, Gwnnws Issa, Card.

WWS(1848). The principal lode of LOGAULAS (q.v.) is again seen on the W at Bwlch y Baedd.

1"127 SN 699 891

BWLCH-Y-DDERWEN, Ceulanymaesmawr, Card.

See also TY-NANT

JRF-S(1979) 31 Trial level in Frongoch beds just E of the farm.

1" 127 SN 706 637

BWLCH-Y-DDWYALLT, Caron-uwch-clawdd, Card

JRF-S (1979) 86. Unsucc. trial for lead ore near here.

1" 127 SN 725 908

BWLCH-Y-GARREG, Ceulanymaesmawr, Card.

JRF-S (1979) 19. Several trials on Esgairhir V. betw. Blaenceulan & Esgairhir M's; on N slopes of Bryn Mawr.

OTJ (1922) 21

BWLCH-Y-GWYNT M., Up. Llanf.-y-Cr., Card.

See CWMYSTWYTH WEST M's. 79 73

1" 127 SN 709 948

BWLCH-Y-MAEN, Ysgubor-y-coed, Card.

JRF-S(1979) Trial lev. to NE.

BWLCH Y RENNAID MINE, Trefeirig, Card.

See BWLCHRHENNAID MINE.

1" 127 SN 732 862

BWLCH Y STYTLEN, Trefeirig Caid.

WWS (1848). Ndr wkg. On same lode as LLECHWYDD HÊN, LLECHWYDD HELIG, LLANWR Y CWM, CAMDŴR and DROSGOL, (qv), which bears galena & blende (80) "Bwlch-y-Stytlen"

OTJ (1972) 27 Camdwr lode tried extensively here, ca 1¼ ml SW of CAMDWR, but unprofitable.

PT (/68) u/s.

GR, GS, RN Pillinger (6/65) Shale dumps at SN 732863

have some quartz, a little sphalerite & chalcopyrite; & widespread red & yellow iron-staining

J.G. Raybould, PhD Thesis, Aber., (1973) 72. Small amounts repptd hydrozincite on tips. Quartz, galena, sphalerite, pyrite, chalcopyrite.

JRF-S (1979) 49. Camdwr V., ENE in Gwestyn & Van tried by level to E at ~1,175 ft OD. Tried 1855-8 Engine Sh to 18 ft below adit. Vein said to be "strong" of clay with galena & sphalerite, with cerussite near surface.

MJ (1855, 1858)

(BWLCHYSTELLEN)

DEB (1976), 3, 45

1" 127 SN 72, 785

CAEGYNON MINE Cwmrheidol. Card. 718784

See also CWM RHEIDOL etc; RHEIDOL UTD. M's.

OTJ (1922) (18) Pb/Zn p99:-100. In Rheidol valley 3/4 ml below YSTUMTUEN MINE. Two lodes, N with galena, S with mainly blende. Pyrite; blende assoc with marcasite. p29. In opencast a few yds E of the engine-shaft, blende & gozzan.

J.G. Raybould, PhD Thesis, Aber., (1973) Quartz.

72 78

Shaw RP & Critchley MF Bull PDMHS (1978) 7 69-86 (MA 81-3913)

Sphalerite, galena, chalcopyrite, pyrite, in quartz, ankerite in Lr Silur. siltstones, mudstones & shales. >2250 m of levels still accessible. (with Rheidol Ltd. M).

JRF-S (1979) 61. At 718784 on two ~EW parallel veins in Frongoch, ~100 ft apart. N vein richer in Pb ore, S vein in sphalerite. Deep adit at 230 ft OD at 10 fm deep in shaft (to 70 fm below adit). Veins resemble Castell V. & prob. its branches. Active 1850 intermm. → 1875.

MJ (1850–59).

DEB (1975) 2, 33.

1" 127 SN 712 947
709 948

CAE-MARDIN, Ysgubor-y-coed, Card.

JRF-S (1979) 17. Trial level to NE

OS 2½" map shows 2 levels nr Caemardin "Trial level" at 712 9465 & "Old Level" at 709 948

CEUNANT MINE, Trefeirig, Card

See CAE NANT 70 82

1" 127 SN 693 919

CAER ARGLWYDDES, Llanyrafelyn, Card.

JRF-S (1979), 27. Trial level to NW on a vein in Frongoch beds, prob. SE end of Bryndyfi M. vein.

1"127 SN 710974

CAERHEDYN, Ysgubor-y-Coed, Card.

JRF-S(1979) 17. Trial on ~EW Hyfnant fault. Level to S from Hyfnant valley.

CAMBRIAN MINES, Cwlany maes mawr, Card

See ESGAIR HIR and ESGAIR VRAITH.

of CAMBRIAN SOUTH MINE [= CAMDWRBACH] 74 89

CAMBRIAN S. MINE, Trefeirig, Card.

See CAMDWRBACH MINE 74 89

1" 127 SN 75887?

CAMDWR, Trefeiriq Card.

See also CAMDWRBACH; CAMDWRMAWR; DROSGOL; BRYNYRAFR

WWS (1848) Not wkg. "Camdwr & Drosgol" on same lode as LLECHWYDD HÊN, LLECHWYDD HELIG, LLANWR-Y-CWM, & BWLCH Y STYTLEN, (q.v.), which bears galena & blende. At Camdwr iron pyrite. (80)

[Probably = CAMDWRMAWR, which is on the Bwlchystyllen-Drosgol lode]

1" 127 SN 745 892

CAMDWR BACH MINE, Ceulanymaesmawr, Card

= CAMBRIAN S. MINE | See also CAMDWR; BRYNYRAFR; NANTYCAGAL

OTJ (xxx) (19) Zn. p132. Trial ½ ml N of BRYNYRAFR mine. Adit ca 1200'OD driven E for a considerable distance on a lode which may be a contin. of the NANTYCAGAL LODE Blende only returned.

OS 2½" map shows "level" at SH 7450 8915, with "trial shaft" above, at 7465 8915, which could be on E continuation of Nantycagal lode. Mines are also shown on/near the Bryn-yr-afr

lode, near Camdwr-bâch, at 739 885 and 737 883

WJL (1967), Map, p. 170 Labels "CAMDWR-BACH" the S mine (SE of Bryn-yr-afr) is the mine at 752 876 ("Camdwr mawr"); and labels the mine N of Bryn-yr-afr "CAMDWR MAWR" is the mine at 74 88 ("Camdwr Bach")

JRF-S (1979) 47 Dressing plant ("Mine" on OS maps) at 739 886 mine at 745 892. Vein a little N of W in gwestyn e Van. Contin. of Nantycagal V (?). Level on V. to E, outcrop thick. Zn ore raised, 1902-4

DEB (1976), 3, 52

1" 127 SN 752 876

CAMDWRMAWR MINE Trefeirig, Card.

See also CAMDWR, DROSGOL, CAMDWR BACH

OTJ (1922) (20) Pb/Cu 132: Adit ca 1230'OD driven E on Camdwr lode for considerable but unknown distance. 5 tons lead ore sold in 1856.

[Probably = Camdwr mine of WWS (1848)]

WWS (1848) CAMDWR (80) Not working. "Camdwr e Drosgol" on same lode as Llechwydd Hên, Llechwydd Helig, Llanwr y Cwm, e Bwlch y Stytlen which bears galena e blende. At Camdwr, iron pyrite

WJL (1967) Map p170 labels this mine "CAMDWR-BACH" and labels "CAMDWR-MAWR" the mine to the N, at 74 88

JG Raybould, PhD Thesis, Aber., (1973). Quartz; ankerite; chalcopyrite; sphalerite; galena; tiny cubes pyrite, "occasionally".

JRF-S (1979) "SN 751 887" [Error for 751 877?]. Trial adit to NE on CAMDWR VEIN (NE in Van) at 1230 ft OD, & Engine sh. to 30 fm below adit. Active 1855-7, 1865. On E shore of reservoir now. Lead & copper ores returned!

MJ (1855-7, 1865).
WJL (1967), 284.
DEB (1976), 3, 53.

Ceulanymaesmawr

CARDIGAN CONSOLIDATED MINES, A Card.

See ESGAIR HIR, and ESGAIR VRAITH 74 91

1" 140, 127 SN 730 659-660

CARDIGAN SOUTH BOG M., Caron-uwch-clawdd, Card.

See also CARON M.

J.R.F-S (1979) 85. At 730 659. = BRYNCRACH (?)
Small mine or trial on same vein as Brynhope [CARON] but on E side of B4343 road. Several shafts. Tried 1850-1, worked 1857-8. galena masses found.
MJ occas. reports 1850-1865.

DEB (1974) 1 ~~116~~ 37. BENDIGAID = WEST FLORIDA = CARDIGAN SOUTH BOG, at 731 660. 5 shafts sunk in 1840's, none below 10 fm depth.

1" 127 SN 762 833

CARN-LLWYD, Ciomrheidol, Card.

See also NANT GAREDYN LODE

JRF-S (1979) 49. Trial to SE in Van.

1" 140 or 127 SN ~~725 659~~ 725 659

CARON MINE, Caron-uwch-Clawdd, Card.

See also CARDIGAN S. BOG M.

OTJ (1922) (21) Pb p133 Exact position unknown. Probably one of the small mines E of the railway, N of Tregaron.

N-F(1959) Returned 89 tons lead ore ca 1880

GWH(1971)65 1½ mls S of Pont rhydfendigaid [ie 1" 127, near 73 64]

JRF-S(1979), 85. BRYNHOPE = NEW LISBURNE = CARON(?) at SN 725659. Vein a little N of E in Frongoch

Working 1850. Lisburne Sh. sunk 1857, reached 18 fm lev. in Aug 1858, where vein 3 ft wide of quartz & calcite with galena & sphalerite. Last worked, briefly, in 1875.

MJ reports 1850–1865 sometimes with Cardigan S. Bog.

GS 1:100 000 map, Cent. Wales Min'g Field (1973) shows "Bryn-Hope" mine at 730 660 on same vein as Abbey Consols, very near where DEB shows "BENDIGAID" [see CARDIGAN S. BOG.]

1" 127 SW 775 813 774 809

CASTELL MINE, Cwmrheidol Card. (I) ↓

[778 815 "E.CAST."

OTN (1922) (22) Zn/Pb/Cu p94-6 Also known as WEST ESGAIRLLE; DYFFRYN CASTELL; NEW CASTELL, & locally as CRIPIAU BACH or GWAITHDU.

A small & shallow mine. Calcite, ~~gwzzany~~ quartz, blende, galena. Copper ore, in a shaft ½ mi E of Castell mine (this shaft also called WEST ESGAIRLLE.

p28: Lode. calcite, siderite, blende, chalcopyrite, seen in opencast W of the engine-shaft.

J.G. Raybould PhD Thesis, Aber. (1973) CASTELL LODE 106ff
E limit of Castell Lode in gorge behind Fagwr-fawr farmhouse [ie near 783-4 817] nearly 1km E of Castell M. Quartz, ankerite, a little chalcopyrite, some sphalerite
Between here & Castell M., a trial, with ankerite, quartz, galena, chalcopyrite.
Castell Mine:- sphalerite, quartz, ankerite.
Some dissem. galena, with a very little chalcopyrite also in trial by Nant Meirch [ie near 777 813]

JRF-S(1979) 55-56. CASTELL = DYFFRYN CASTELL = NEW CASTELL = W. ESGAIRLLE = GWAITHDDU = CRIPIAU BACH. SN 775 813. Photo-Plate VII.
Vein v N-E here in Gwestyn & upper Vein on N side (footwall) & lower Frongoch on hanging wall (S). Much quartz & calcite, with

CASTELL M., Cwmrheidol, Card. (II)

masses of sphalerite; galena in spots and ribs.

Main (older) workings at 775813, reworked intermittently 1850 – 1917. In 1850 Engine Shaft 20 fm deep, in vein 2 ft wide. EAST CASTELL shaft sunk in 1874 at SN 778 815, where copper ore reported in vein.

M.J. (1850-1865) various reports.

WJL (1967) 215

DEB (1975), 2, 10.

JA Jones & NJM Moreton (1977) Aurichalcite

RSN (1996) 29. Pyromorphite, sphalerite, pyrite, chalcopyrite, (?) greenockite.

S. Rust (2004) BMSN 67/2-3. Euhedral apatite x/s, albite, muscovite, quartz, rutile in alpine clefts.

1" 127

CEFN BRWYNO, Melindwr Card

See CWM BRWYNO 71 80

~~WWS (1848). "Whg" (65)~~

~~CWM BRWYNO~~

CEFN-CWM-BRWYNO, Melindwr, Card.

See CWMBRWYNO M. 71 80

1"127 SN ~~680 869~~ 679 869

CEFN GWYN, Coulany maesmawr, Card.

WWS (1848) A level driven under Cefn gwyn house. N&T Whg. (86?)

OTJ (1922) (23) Pb. 22, 61, 133: In Leri Valley ½ mi below Elerch or Bontgoch. Two sets of workings. Adit on each side of valley on the HAFAN or S. LODE, the E adit going ca. 60 fms, the W. ca. 45 fms. 80 yds to the N [8 what?] was an engine-sh. ca 20 fm deep, on a small irreg. N lode. Lead ore 25: Coarsely xlised vein quartz, calcite, galena, blende, chalcopyrite.

JRF-S(1979) 30-31. Worked HAFAN V on both sides of Leri valley, in lower Frongoch beds. V 7-9 ft wide, breccia cement'd by quartz, with galena & sphalerite.

Adits driven, at ~650 ft OD; 360 ft on W & 270 ft on E side.

Abandoned late 19th Cent.

MJ (1850-54, 1858 (Sept)).

DEB (1976) 3, 33

1" 127 SN 656 829

CEFNLLWYD, Parcel Canol, Card.

JRF-S (1979), 41. Trial sh. in Frongoch beds for contin. of Camdwr V to SW of Bronfloyd.

1"127 SN 684 836

CERIGYRWYN MINE, Trefeirig Card.

See also DAREN MINE, CWM DAREN

OTJ (1922) 73. An old working? on the Daren lode. p 134 (Under Cwmdaren)

JRF-S (1979) 35 Trials on NE contin. of Daren veins, in Frongoch beds. "ROMAN" Level at 585 ft OD at SN 684 835 on vein reopened, with old sh's, 1853. Last active 1856.

MJ (1853-6)

1" 127 SN 708 827

Tirymynach Index Card

(CAE NANT) = CEUNANT | See also PENGRAIGDDU etc.

WWS (1848) Not wkg. Shown as through on GOGINAN SOUTH LODE (qv), with BWLCH CWM ERFIN MINE (qv). (41) "CAE NANT"

OTJ (1922) (17) Pb p 82-3 An old mine ~~recently~~ 3 adits. One a fine-grained "steel ore" similar to that of GOGINAN (qv). Quartz.

JRFS (1979) 51 CEUNANT. Vein NE in lower Frongoch – contin. of Bwlch mine V?, a N

branch of Goginan V.

Three levels: Deep adit at 870 ft OD. for ~ 900 ft to NE along vein; oreshoot worked from surface to ~ 40 ft below deep adit, of fine-grained galena – "steel ore".

Old. Little worked since 1850 – 5 tons Pb ore recorded for 1852.

MJ (1852)

WJL (1967) 334

DEB (1975) 2, 42.

1" 127 SN 621 878

CIL-OLWG, Geneu'rglyn, Card.

JRF-S (1979), 29: Trials in Frongoch beds; levels.

1" 127 SN 741 80, or 737806

CLARA MINE Cwmrheidol, Card.

See also LLEWYRNOG etc

OTJ (1922) (24) Pb/Zn 133: By Aber-Llanidloes road, at 11th milestone from Aber. Worked from a shaft ca 30 yds S of road. Close to the road, on N side are workings almost up to the outcrop, the dumps of which contain large masses of blende in stringers & veins up to 4 in. wide. Some galena & a little marcasite.

MJ (1852 onward)

WJL (1967) 170, 193

DEB (1975) 2 13, 16, 18

JRF-S (1979) 54-5. CLARA = OLD CLARA = CLARA UNITED = CLARA & LLYWERNOG. SN 737 806
Part of LLYWERNOG = PONTERWYD M/s complex, with several veins in lower Frongoch. Worked 19th Cent., for lead & zinc ores, from shafts on both sides of the main road (A 44).

1" 127 SN 722 690

CLODDIAU, Ysbyty Ystwyth, Card.

JRF-S (1979) 80. CLODDIAU. Trial level at 722 690 prob. to test SW contin. of Glogfach vein, between Glogfach and Llwynmalus mines. No details.

CNWCH-YR-ARIAN M., Upp. Llanb.-y-Cr., Card.

See PANTMAWR M.

1"127

SN 669 919
672 919

COED-GWAR-CWM, Llangynfelyn, Card.

JRF-S (1979), 27. Trial level (at 300 ft OD) and shaft, (in 1851) on NNE Pensarn V, in Frongoch keds. (HALLETT'S SHAFT).
Another unsucc trial in 1853 at 672 919.
MJ (1850-3)

1" 127 SN 671 781

COED TY-LLWYD, Upper Llanfihangel-y-Creuddyn, Card.

JRF-S (1979) 56. Trial on ~EW vein

Upper Llanfihangel y Creuddyn

COMET LODE, Cwmystwyth, Λ Card.

See CWMYSTWYTH, in particular PUGHS, and COPA HILL.

CONINOG, Ceulanymaesmawr, Card.

See CYNEINIOG 72 88

1" 127 SN 7 7/8

CONSOLS MINE, Cwmrheidol, Card.

See also CWM RHEIDOL etc.

D C Davies (1888). One of the Cwm Rheidol valley mines [qv]

COPA HILL, Up. Llanfihangel-y-Creuddyn, Card.

= COPPER HILL,

See CWM YSTWYTH MINES 80 75

COPPER HILL, Upper Llanfihangel y Creuddyn, Cwmystwyth, A Card.

See ~~COPPER HILL~~
CWM YSTWYTH MINES 80 75

COPPER LEVEL MINE, Trefeiriog Card

See CWMDAREN MINE 6883

COPPER LODE, Upper Llanfihangel y Creuddyn Cwmystwyth, 1 Card.

=BELSHAZZAR LODE.

See CWMYSTWYTH, ~~& KINGSLODE WORKINGS~~

COURT GRANGE MINE, Tirymynach, Card.

See PEN Y CEFN 6585 6685

"COVEDEN MINE", Cent. Wales. [Card]

Error for LOVEDEN M. (?) [q.v.].

CRAIGEN DDU, Caron-uwch-clawdd, Card.

See GRAIGEN-DDU 7765

CRAIGNANTBACH MINE, Ciomrheidol, Card

See BOG MINE 73 81

1" 127 SN 704 907

CREIGIAU DUON, Ceulanymaesmawr, Card.

JRFS(1979) 18. Crosscut trial level to N in gwestyn rocks, the most W on N vern of Blaenceulan M.

CRIPIAU BACH, Cwmrheidol, Card

See CASTELL MINE 77 80

1" 127 SN 66 72

CROSSWOOD, Upper Hanilar, Upper Hedrod, Card.

See also LISBURNE MINES

GeL (1858). Calcite, fine xls with flattened or somewhat rounded summits, like some of the Alston specimens; with quartz, at Lisburne lead mines near Crosswood.

1"/27 SN 758 799

CROWN =CRWN M., Cwmrheidol, Card.

cf. CROWM M's, Llanfair Clydogau, q.v.

JRF-S (1979) 63 CRWN=CROWN. at 758 799
Trials on ENE Castell Vein, in lower Frongoch; active 1848.

MJ (1848) 1st July.

1" 140 SN 6 5

CROWN MINES, Llanfair Clydogau Card.

cf CROWM M, Cwm Rheidol [q.v.]

WWS (1848). ③ E of Llanfair. "Lately abandoned"

GWH (1971) 69 May = GWAITHVACH or PONT GLANRHYD trials. [q.v.]

1" 140 SN 695 541

CWM BREFI MINE, Llanddewi Brefi, Cardigans.

See also LLANDEWI BREFI etc

GWH (1971) 71. Important part of workings of Llandewi-brefi United, Cardiganshire Mutual, and Rhyscog Mining Co's between 1856 & 1862. Probably the 2 levels on either bank of Dulas brook immed. above confluence w. the Brefi S level inaccess. N level 50 paces to NE no stopes, x-cuts or strong mineralis'n.

Found ca 1854 - lead found, then in 1856 an adit entered a course of rich copper ore. A level driven > 50 fms with a winze, & a x-cut to 2 other lodes.

JRFS (1979) 87 = LLANDDEWIBREFI. Trials for lead and copper ores said to have been made c 1856-1860. Level on a 2 ft vein of quartz, with galena, sphalerite, chalcopyrite, much pyrite. MJ (Llanddewi brefi) 1856-60

WJL (1967) 28

1" 127 SN 716 806/713 805

CWM BRWYNO MINE, Melindwr, Card.

See also CWM RHEIDOL etc; LLEWYRNOG M.

of CEFN BRWYNO of WWS(1848)

OTJ (1922) (25) Pb/Zn p86. Section. In lower Frongoch formations. Lead ore, blende.

JRF-S (1979) 52–54. Plan Section, p 53. At 713 805.

= CEFN BRWYNO = CEFN-CWM-BRWYNO

Vein strikes EW at W end; curves to ENE at E end; continues E into LLYWERNOG M, where EW again. V. in lower Frongoch. First worked in 1840 by 2 shallow adits e EASTERN sh. (to upper adit) TAYLORS Sh sunk 1852 to 104 fms. WESTERN Sh.

Deep adit levels from 708 706 at 780 ft OD is 56-fm level (ref. Taylors Sh.). Aband 1892. Lead e zinc ores recorded

MJ (1849 onwards).

WWS (1848). CEFN BRWYNO, (65), working.

WJL (1967), 180.

DEB (1975), 2, 18.

RSN (1996) 29, 23 Report on "Cwmbrwyno mine" but NGR given as ST 733 809 which is near LLEWERNOG M (q.v.) ["sphalerite, quartz"]

1" 127 SN 6930 8375

CWM CANOL, Trefeiriog Card

See also DAREN E. MINE

WWS (1848) NDr wkg (78) Has branch lode → (79)

GR et al (6/65). Extensive dumps, with ruins & a chimney, around SN 696838, have quartz, & a very little blende, galena & chalcopyrite. They are just W of EAST DAREN MINE at Cwm Symlog, & may be part of it

1" 127 SN 6825834

CWMDAREN MINE, Trefeirig, Card (I)

=COPPER LEVEL | See also CERIGYRWYN; GWAITHYRAFON

TWLL Y MWYN

OTJ (1922) (26) Pb/Cu p73, 134 Level gopor = copper Level on Daren lode to the Cwmdaren or Copper shaft. p134 The adit "COPPER LEVEL" ca 425'OD, on N side of road to Cwmsebon or S. Daren, c ca 600yds W of that mine. Driven ca 150fm on Daren lode. Engine shaft, to 50 fm below the adit, 70 fm from its mouth. Ca 120 fm NE of shaft an old adit, ca 585'OD called the ROMAN ADIT, on this lode, to the

CERIGYRWYN shaft where some rich lead ore obtained. GWAITHYRAFON is ca. ¼ mi further in same direction.

RSWB (8/65) V 3 No secy mins seen. Shale, with galena, quartz, etc.

JRF-S (1979) 36. Daren V ~~ea~~ worked on N side of Erfin Valley, in Frongoch. 4-6 ft wide of quartz w. much chalcopyrite, some galena. V. old. COPPER LEVEL at 425 ft OD, (oppos. OLIVERS ADIT & DAREN M) driven 900 ft along vein. Portal now collapsed. Lead & copper ores recorded.

MJ ~~[illegible]~~ 1850-57, 1863

CWMDAREN MINE, Trefeirig, Card. (II)

WJL (1967) 327

DEB (1976), 3, 15 In 1868-70 GWAITH YR AFON worked as CWM DARREN (p19). p15 CWM DARREN at 681 833, later embraced TWLL Y MWYN

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite, a single spec., bright orange bipyr. to 0·5 mm scattered on thin films yell-green pyromorphite on qtz-veined pale grey mudstone on overgrown dump at 6805 8335, below collapsed level portal.

1" 140 SN 699 540

CWM DULAS, Llanddewi Brefi, Card.

See also LLANDDEWI BREFI

JRF-S (1979) 87 8-10 ft vein reported crossing a stream here; trial 1856-1860. MJ in Llandd. Brefi reports 1856-60

1" 127 SN 708 935

CWM ~~EINION~~ EINION, Ysgubor-y-Coed, Card.

cf YSTRAD EINION

WWS (1848) "Lately worked on a small scale". (118)

OS 2½" map shows hillside just NW of Ystrad Einion named as "CWM EINION" – also so named is hamlet at 712 935

JRF-S (1979) 18 Trial level prob on same vein as Ystrad Einion to the NW. Working v 1745

WJL (1967) 96.

1" 127 SN 69[illegible] 696 829

CWM ERFIN Trefeirig Card

See also MELINDWR (= Cwm Erfin W); BWLCH; BWLCH CWM ERFIN

WWS (1848) Ndr wkg (75)

OTJ (1922) (27) Pb/Cu/Zn. p73: An old mines (Mines Royal) – but the old mine might be BWLCH MINE (qv). Section, p 74. Blende, lead ore, copper ore.

RSIOS (8/65) V, 3. No sec. mins. seen. quartz; galena; etc in shale.

GR et al (6/65) Large shale dumps at SN 695 829 have large lumps white calcite, with

r/s in cavities; very little quartz; galena; abundant massive brown sphalerite enclosing specks of chalcopyrite & sometimes thinly coated with hydrozincite [checked by IR]

JRF-S (1979) 40. ~NE V. in Frongoch beds, local, not traced far in either direction. 3 main sh's:- TAYLORS (on W; to 45 fm. lev.); ENGINE (to 60 fm. lev.); DRAWING sh (to 60 fm. lev.) Synclinal overshoot, best to E of Drawing Sh. Argent galena; zinc & Cu ores.

MJ (1850 et seq)

WJL (1967) 43, 50, 184-5.

DEB (1976), 3, 6.

CWMERFIN W. MINE, Melindwr, Card

See MELINDWR MINE 6781 6881

1" 127 SN 64x 890

CWM LERI LODE Geneu'rglyn & Ceulanymaesmawr, Card.

See also ALLT Y CRIB LODES, etc.

OTJ (1922) 54: Crosses R. Leri ½ ml below Talybont. 3 adits from Alltycrib wood. Richest at top.

1" 127 SN 735 672

CWM MAWR M; Upper Gwnnws, Card.

WWS (1848) (11) An old mine 35 fms deep e once very productive. Not wkg.

OTJ (1922) (28) Pb/Zn 134: ¼ mle E of the school, ½ mle N of Ponterhydfendigaid e ca 2mle by road from Strata Florida Stn.
Lead ore; blende. (1913-1917).
Shaft sunk to 20 fm below a shallow adit (650'OD) driven E on lode

RSWB (5/69) I 139 Dumps at 735 672 of shale, with quartz; calcite → ankerite(?), traces galena, sphalerite.

JRF-S (1979) 84. Small ~~Pb~~ mine - a late development, though said to be "old" in 1848. Working 1913-1917. Vein ll^{e} to, e S of Esgairmwyn V., in Upper Frongoch. Adit on vein to NE at 650 ft OD from Nant-y-Cwm, N of Pontrhydfendigaid; shafts on vein to NE. Reached 20 fm below adit. Lead e zinc ores recorded

DEB (1974, 1976) 1, 36.

1" 127 SN 7, 7₂

CWM MWYDION LODE, Llanafan, Card.

WWS(1848). ∂ the LISBURNE MINES (q.v.) "wkg" This lode is part ∂ OROGWYNION (q.v.). Lode (21), with FRON GOCH & CRAIG GOCH

CWMNEWYDDION, Lower Llanf.-y-Cr., Card.

See GRAIG GOCH, Lower Llanf.-y-Cr. 70 74

1" 127 SN

CWMPRYF MINE Card.

OTJ (1922) (29) Pb. p135: Exact position unknown
Prob. a trial in the Rheidol Valley.
Lead ore returned for 3 yrs around 1880

1" 127 SN 77–78 (General)
730 783 (Mine)

CWM RHEIDOL, Cardigans (I).

See also DEVIL'S BRIDGE; YSTUMTUEN; PEN RHIW; NANT EOS; RHEIDOL UTD.; LLEWYRNOG; CONSOLS; CAEGYNON; LLWYNTEIFY; BWADRAIN; BWADRAIN S.; GELLI'R'EIRIN; CWM BRWYNO; TY LLWYD; ABER FFRWD; PANT MAWR; ERWTOMAU; RHIW RIGAS LODES; NANT MEIRCH

DC Davies (1888) A belt of mines runs from Devils Bridge along the Rheidol, including Llewernog [Llewyrnog], Powell [Llewyrnog], Consols, & other mines. The lodes vary – some are rich in silver, others in sphalerite, others in pyrite as some of the Ystumtyn [Ystumtuen] lodes. "Manganese" is sometimes present

J.G. Raybould, PhD Thesis, Aber., (1973).

CWMRHEIDOL MINE = YSTUMTHEN MINE [qv].

JRF-S(1979)61-62. CWMRHEIDOL (730783), TY'N-Y-FRON (724785) & YSTUMTHEN (732788) considered together, usually worked together, esp. in later years.

See Plates VIII and X (photos). On NOE Castell vein in Frongoch. Crosscuts from N side of Rheidol gorge to deeper levels :- ALDERSON'S L., 570 ft OD to N as x-cut to vein at 1400 ft; another at 330 ft OD as x-cut N to vein at 1620 ft - this lower level = "Cwmrheidol mine". Sometimes also worked

CWM RHEIDOL, Cwmrheidol, Cardig. (II)

with PENRHIW M. [to E; qv] (workings connected) and with BWLCHGWYN M.

Main ore sphalerite; some galena

p62 At times, part of "ABERYSTWYTH M's." See PEN RHIW

OTJ (1922) 979

WJL (1967) 89, 93, 96, 99, 188, 290, 337

DEB (1975), 2, 22.

CWM ROBERT; Llanddewi Brefi, Cardigans.

See PENTRE TRINANT

=DAREN S. MINE 1" 127 SN 685 830

CWM SEBON MINE, "~~Aberystwith~~ Trefeirig", Card. (I)

See also CWM SYMLOG, DAREN

TMH (1868), 74. Lr. Sil-Slate. (Pb) Argentiferous galena.

WWS (1848). "wkg." 22-32 oz Ag/ton Pb. (76) Well crystallised argentif-galena.

OTJ (1922) (37) Pb/Cu/Zn. p69. Section. In Erfin valley ca ½ ml above Penbontrhydybeddau Deepest mine in area. Argentiferous galena, chalcopyrite, blende, lode visible in a shallow adit on hillside W of shaft. Mostly worked since 1840.

(92) p149 Pb/Zn. THOMAS UTD. ?=S. DAREN in 1855-6.

RSGSB (8/65) I, 3 No recd mins. Shale, with galena, quartz, etc.

WJ Hughes (N-F) (1959) 277 The deepest of the Card. mines worked from +600 → −420 ft OD. Two orebodies of galena, some blende & chalcopyrite

GR et al (6/65) Large dumps, with galena, quartz, chalcopyrite, some calcite

JRF-S (1979) 39. SOUTH DARREN = CWMSEBON = THOMAS'S LTD. Same V as Daren E, ~NE in Frongoch. 3–12 ft wide of breccia cemented by

CWM SEBON M., Trefeirig, Card. (II)

quartz with galena, chalcopyrite, some sphalerite.

Deepest mine in area WESTERN or MAIN Sh. to 168 fm below collar of OLD ENG. Sh., ie 1050 ft below surface. 1st discove worked 1840.

Ag content v. high for area, ~27 oz/ton "poss. because of high prop'n of cupy in the V." Worked to 1893. Known as THOMAS's UTD M. 1853-6 after the proprietor.

MJ (1842, 1850-65)

WJL (1967) 367

DEB (1976), 3, 8.

C

or DARREN E

1" 127

SN ~~70 83~~ 7

DAREN E. MINE, Trefeirig, Card. 698837

~~CWMSYMLOG MINE~~

See also DAREN MINE CWMSYMLOG WEN, CWM SEBON; CWM CANOL; BLAENCWMSYMLOG, GWAITH-YR-AFON

OTJ (1922) (36) Pb/Cu p. 64-8 4¾ ml E of Bow St Stn.

Very old; mentioned in Sir J Pettus's "Fodinae Regales" – worked by the Soc. of Mines Royal. Sir H. Middleton's main mine. Section facing p 65.

Lead ore

RSNOB (8/65) V 3-4 No supergene minerals seen.

Large shale dumps, with quartz, galena, etc

FJN (1962) 71 Rich mine. Successfully used water-driven machinery to work 124 fm below adit ~~machinery~~

J Williams, "The Nat Hist of the Min. K'dom" 2nd Ed, Vol I, Edinb'gh (1810)

In early 19th Cent., known as a lead mine very rich in silver.

JRF-S (1979) 35-6, Plate XII p 38.

EAST DARREN = CWM SYMLOG = GWAITHDDU.

Large, v. old mine. V. success in 17th ~~[illegible]~~ — 18th Cent. Reworked mid 19th Cent ⇒ 1901.

NE vein swings here to ~EW, worked in lower Frongoch. Trials to E unsucc., V being lost in gwestyn shales.

Argentif. lead ore.

MJ (1850 et seq.)

WJL (1967) 180, 184-5, 187, 192, 282, 339.

DEB (1976) 3 19 et seq.

CWMSYMLOG NORTH M., Melindwr, Card.

See TY'R-RHOD 7083

also GWAITH-YR-AFON 6983

CWMSYMLOG WEST M., Trefeirig, Card.

See ~~[illegible]~~ 69 83
GWAITH-YR-AFON MINE

1" 140 SN 682 500
684 499

CWM TWRCH, Llanddewi Brefi, Cardigans

See also BLAEN TWRCH TRIALS (Caermarthens).

GWH (1971) 49. All traces of level near 682 500 now gone.

JRF-S (1979) 89: SN 684499. Trial level, prob. for Pb ore; no details.

1" 140 SN 718 580
720 583

CWM Y GRAIG GOCH, ~~Caron-is-Clawdd~~, Cardigans.

GWH (1971) 71 to WD (1815) Lead formerly raised, acc'g

Adit at E end of Craig Fintan partly collapsed, enterable for a few yards; ½" clay in roof. Adit or adits now obscured on other side of valley, one said to be 50 yds long, with blende.

JRF-S (1979) 90 718580 & 720583. Several 19th Cent. trials for lead ore; small

amounts found, also sphalerite, but too remote.

1"127 SN 7974, 8074, 8075, 8175

CWM YSTWYTH MINES, Up. Llanfih.-y-Cr. Card. (I)

See also CWM YSTWYTH SOUTH M; CWMYSTWYTH WEST M's;

Includes, from W→E, PUGHS, KINGSIDE, PENGEULAN, COPA HILL (COPPER HILL) (E of Nant yr Onen).

WWS (1848) CWM YSTWYTH LODES: Working, 12 main lodes; extensive but shallow workings on intricate group of lodes, "lodes 31-42". Pyrite in Comet lode. Mine plan (in "plans" file, e in SJSH (1981)).
COPPER HILL. (p60). Calcite in considerable masses.

GeL (1858) CWM YSTWYTH :- smithsonite

OTJ (1922) Mine (32). p113: In 3 parts, from W→E PUGHS, KINGSIDE & COPPER HILL. p114 section, p115 plan. Also see p 30 ff; map facing p. 32
PUGHS, p113 W part, on COMET and MAIN lodes, also branches & minor lodes eg. GILLS (= W contin. of MITCHELL's). COMET LODE: galena, sphalerite, pyrite in crystallised quartz, occas. calcite. Debris characterist. rusty-looking. MAIN LODE: galena in quartz, not usually mixed w. sphal. & pyrite. MITCHELL's: Above MITCHELL's LEVEL mostly galena in vughs; below in ribs; lower,

CWM YSTWYTH, Cardig. (II)

B.J.S. Hughes (1981) "The Cwmystwyth mines"

nearly all sphalerite.

KINGSIDE WORKINGS: Central part, mainly on KINGSIDE SHAFT & ADIT, and on LEVEL FAWR (= BONSALL'S LEVEL) at 820' OD. Also other sh's & lev's. Lodes: KINGSIDE (= MAIN LODE of Pugh's); BELSHAZZAR or COPPER LODE, with galena, sphalerite, no pyrite; PUMPSINK; PENGELLAN GROUP; "GILLS" [= MITCHELL'S].

COPPER HILL: E part, where KINGSIDE LODE gives off a number of branches & yielded

much sphalerite, some galena, and ~
3 dwt gold/ton. COMET LODE here is a
mixt. of sphalerite, galena e chalcopyrite
in calcite, dolomite e quartz.
PENGELLAN LODES; from N→S: NEW or FOX's;
PENGELLAN SOUTH UNDERLIER; PENG. N. UNDERLIER
There lodes richer in Ag than "others in the
district".

FJN (1962) 70. Worked 61 years.

R. Warner, "Walk through Wales" (1799) 3rd Ed., Bath.
CWM-YR-YSTWYTH MINES [in 1797], property of
Mr Powell, of Nanteos, leased to Sir Thomas

CWM YSTWYTH M's, Cardig. (TT)

Bonsel, of Derbs. Descrip. of mining. Lead ore, quartz, "spar" [? calcite].

RSWB, TBG II, 89, (4/8/62). Large dumps E of plant, ie ~80s 74s. Quartz; calcite, some nail-head; chalcopyrite, with a little alteration to green stains; plenty sphalerite; galena.

JRF-S (1979) 80-81. CWMYSTWYTH + COPPER HILL; Plate I, photo ~1900; Plate II photo inside incline down to Kingside lode.

Ancient, no record of earliest workings.

Veins at higher horizon (in Cwmystwyth Formation – Upper Valentian (Silurian) grits & dark mudstones) than any other major mines in Cent. Wales orefield. Normally worked together but workings on Copper Hill physically separate & not active in recent times.

Veins: Comet, Gill's, Mitchell's, Kingside; trend N of E but form a complex system & can cross. Post-mineralisin Ystwyth fault complicates, crossing W–E → SE strike at E end, & has cut out all veins in depth – possibly lower parts are on the S (upthrow) side as the Log-y-las vein.

CWM YSTWYTH MINES, Card. (IV)

Most workings in precip S face of Graig-fawr, & above dressing plant, but Pugh's Sh to 54 fm below Pugh's Level is deepest, from which levels to N at 40 & 54 fm, through Yst. Fault failed to find Comet Lode, cut off by fault. To E of plant, Kingside Sh from Kingside Adit, to 35 fm, again met the fault.

Oreshoots v. rich, but pockety. In Copper Hill mines Comet & Kingside V's split into branches & old workings v. widespread, & here increase in sphal. & chalcopy. in relation to galena.

Active (esp. Kingside & Pughs) 1848-92, 1900-1909, 1911-14, 1916. MJ; reports from 1850.

WJL (1967) p.22 & numerous refs thereafter.

DEB (1974, 1976) 1, 19-22. History

SJS Hughes (1981) "The Cwmystwyth Mines".
Description, history, maps, plans, etc. photos. geology & mineralogy p 46-9. Tables.
COMET LODE 12-40 ft wide. Quartz, galena; in parts calcite, sphalerite; large amounts chalcopyrite in E parts. (Pb, Zn, Cu)

CWMYSTWYTH MINES, Card. (V)

KINGSIDE LODE ~3ft wide; quartz & galena only; very occas. a little sphalerite. (Pb,Zn)
BELSHAZZAR LODE (Cu,Pb) is = E part of COMET.
& = "COPPER LODE". Other lodes detailed
Chalcopyrite mostly mined from Belshazzar,
at Copper Hill. Pyrite also marcasite,
assoc. w. sphalerite & rot in water →
gozzan "commonly limonite, geothite & ankerite"
sulphur also yielded & found in places in
Pugh's & in W. Cwmyst. Mt. Not many
secy mins & not spectacular – occas
azurite, malachite, smithsonite, hydrozincite,
cerussite, pyromorphite. The galena

[prob. error for limarite]

is not richly argentif (< 4oz/ton).

Roy Starkey of Dudley (W. Midlands Society) in 11/79 showed RSWB a fine spec. of linarite, w. xls → ~ 2mm from an open adit high up & pointed it out on the map on p21 of DEB I (1976) as that towards W end of Kingside Lode. Said "much blue" in adit.

RSWB & JIW 16/12/79 Investigated Roy Starkey's report. Eventually found it as open adit driven W near SN 807 751 ~1300' OD Short drive to small stope with much blue to green staining on roof & wall in

CWM YSTWYTH MINES, Card. (VI)

also rect plates lautenthalite

vicinity of quartz vein with galena (incl. nice ~1 cm octahedra in vughs); sphalerite; chalcopyrite; linarite in excell. xls; v. good langite Hs → ~1 mm; cerussite; anglesite; nice brochantite xls; * goethite ("limonite"); aurichalcite, ass w. hemimorphite; micro c'less blades; native sulphur (lke); malachite (lke, fizz); leadhillite (lke, tiny c'less hex.); native copper ~1 cm patch, some under quartz, some w. thin coating cuprite; ?-smithsonite, mucky micro-glob to cellular; ?serpierite v. thin light blue coatings, in one patch on

NW wall, mostly on blackened sphalerite, light green micro x-line → powdery coatings, assoc w. brochantite :- Micro chem: ~~f~~ do not efferv. w. acid; has Cu, ~~some~~ a little Zn; IR – basic hydrated sulphate, unidentified. XRD (Miss E E Fejer, BM(NH), priv comm. 14/3/80) Light blue-green crust = unknown, body-centred cubic, a ~ 10 Å.
SEM (Ian Brough, Metallurgy, UMIST). Morphology peculiar — square plates, mostly 1–3 μm, usually stacked in caterpillar-like stacks. Have only Cu, Zn, S (sometimes Si) with Z > 11. Cu/Zn (atom %) = 2.79, 2.95, 2.36; (Zn+Cu)/S = 4.07, 2.75, 3.37. cf langite or ktenasite groups

CWM YSTWYTH MINES, Card. (VII)

Given convenience name "Wakesite"

11/82 Measured $G \simeq 3.36$ (CH_2I_2 + CHI_3!!)
$n \simeq 1.683$

11/82 TQA (Brian Philbrock)

E probe (R. Pattrick)

5/86 Aurich-like mineral with it has Cu+Zn, SO_4+CO_3 & IR similar to Schulenbergite

Acc. to SJSH (1981), p69, Our adit at 807751 is Adit No. 49 "Day Level or Copper Level" immed below Jackilas Adit. See map, p.54 of Kingside and Pengenlan mine. W of Nant yr Onen ∴ NOT "Copper Hill"

Nigel Hoppé Spec → RSWB 4/85 (85-73)
Hedyphane small crystal clusters rich on both sides of rock slab. Coll. u'ground in Bonsalls Level Kaor.

RSWB 11/87. On 80-101 from the Copper Level, elong. xls prob = wroewolfeite. Traces tiny square plates transp emer. green, prob = lautenthalite
Also on 79-204 (of 16/12/79)

RSN(1996) 29. COPA HILL dumps: Pyromorphite, cerussite.



RSWB at Vien.
above Cumystwyth.

Copper Level
JIW photo, 16/12/79

1" 127 SN 80 | 742

CWMYSTWYTH SOUTH MINE, Ystbyty Ystwyth, Card (I)

See also CWMYSTWYTH ~~LODES~~, etc.

OTJ (1922) Pb. (33). p. 135-6 S of the river, opposite Cwmystwyth mine. 3 sets of workings:

(i) X-cut (777'OD) at base of slope 200 yds E of Bwlchgwynt, to SE for 140 fm then SSE 200 fm then aband. 1884. Only important lode 30 fm from mouth, followed 110 fm to E 3 fms wide. good blende on dumps prob. from it. Two small branches at 120 & 140 fm from mouth

NGR SN 79741

(ii) 3 adit X-cuts into a lode on slope opposite the Cwmystwyth dressing-floors, at 1010', 920' and

No 2 xcut at 860' OD.
(iii) Ca 200 yds to E of (ii), adit x cut (767'OD) to S for 24 fm on a lode.
Lead ore only in 1878. (40 tons)

WWS (1848) GRAIG GOCH (Cwm Ystwyth) (30) Not working

1" OS map shows that Cwm Ystwyth S mine is on hillside of Graig Goch.

SJS Hughes (1981) "The Cwmystwyth mines". Descr. History eg p 23, 65-6.

JRF-S (1979) 81. SOUTH CWMYSTWYTH. Trials S of river. E of Ystwyth fault. ∴ lower horizon geol.

than other Cwmystwyth mines – are in upper Frongoch. A vein cut, poor, may be E contin. of Log-y-las vein.

3 sets of workings from x-cut levels driven S into face of Graiggoch.

1" 127 Centred on 78₈ 74₂ 7874 79737974

CWMYSTWYTH WEST MINES, Up. Llanfih.-y-Cr., Card. (I)

See also CWMYSTWYTH MINES, etc.

Includes EAST HAFOD MINE (783 741); BWLCH-Y-GWYNT M (795 739; = WEST CWMYSTWYTH = PENPARC = TAYLORS LEVEL or ADIT); TY'N-Y-GLOG M. (78₈ 74₂, = PENSHAFT M.); PENTRE {BRUNANT, BRINANT, BRUNONT or BRIWNANT} (Cent. on 789 741).

WWS (1848). TY'N-Y-GLOG (Lode 29), not working.
PENTRE BRUNANT, only a long level driving.

OTJ (1922), 136. CWMYSTWYTH WEST MINE (No 34).

Lead mine. Adits driven E on COMET LODE from stream N of Pentre Briwnant [= Cwmystwyth Village on modern maps] ~ 1 mi W of CWMYSTWYTH MINE. A later crosscut N from opposite house to intersect same lode. Little ore. Another set of workings near road, W of BWLCHGWYNT – crosscut to NNW from roadside for ~ 470 fms [= TAYLOR's LEVEL on map].

JRFS (1979) 76. CWMYSTWYTH WEST, 787745; trial levels to E on COMET VEIN between 900 → 1000 ft OD, & low level crosscut to N "from SN 787743 at ~ 790 ft OD" [A bit off-

CWMYSTWYTH WEST M's, Up. Hanf.-y-Cr, Card. (II)

787 743 is well > 800 ft OD. May mean 785 743, or E. HAFOD M at 783 741 ~ 630 ft OD ?]. Levels extensive, but little produced. Lead ore, 1877–80.

BWLCH-Y-GWYNT = PENPARC = WEST CWMYSTWYTH, 795 739

Crosscut level to N through Ystwyth fault & further, to 2800 ft — no further vein (eg Comet Lode) cut. Levels also driven on PENPARC VEIN. See MJ (1855, 1857).

[EAST HAFOD MINE not mentioned anywhere]

SJSH (1981), p4 (map), shows "EAST HAFOD

[p 48- sulphur found in places]
MINE where OS 2½" map shows "Old Level" at
783 741 5 ; WEST CWMYSTWYTH M. cent on 787744.
p 11 "BRUNONT" appears to refer to shallow adit
& PENTRE M. within village of Cwmystwyth
itself. "BRINANT" on p 66.
p 19 WW Smyth's map of 1847 labels Cwmystwyth
village "PENTRE BRUNANT". "TAYLORS LEVEL" at
795 739.
p 23. Lead ore produced, 19th Cent.
p 66-67 History, description, discussion of
the group of mines. E. HAFOD a crosscut
adit 2-300 fm long to lode; abandoned 1873.
TY'N-Y-GLOG part of "WEST CWMYSTWYTH"; lower
level being cleared in 1869 (MJ 7/7/1869);
adits renamed "PENSHAFT" in 1878; lead ore.
[OS 2½" map shows "Ty'n-y-glôg" house at 788 742]

CWMYSTWYTH WEST M's., Up. Llanf.-y-Cr., Card. (III)

RSWB, TBG 4/8/65. Vol II, 90. Stream bed under bridge (Pen-y-bont) at 786 742 :- white quartz boulders - some clear x/s some with chlorite. galena.

1" 127 SN 676 810
677 813

CYNCOED, Melindwr, Card.

JRF-S (1979). Two trial sh's, unknown depth, in Frongoch beds, at 676 810 & 677 813 prob. to test for W contin. of goginan V's.

1" 127 SN 726 880

CYNEINIOG, Ceulanymaesmawr, Card.

=CONINOG=KANINOG.

JRFS(1979), 45. CYNEINIOG = CONINOG = KANINOG
Trials on HAFAN (=DISTRICT) V., a little N & E, in Gwestyn. Up to 40 ft wide, brecciated rock cemented w. quartz. "good lead ore" reported in shallow workings. Level to V. from N side of stream.

MJ (24/8/1850)
OTJ (1972) 24. (Reference to area)

1" 127 SN 659 873

CYNULL-MAWR, Ceulanymaesmawr, Card.

JRF-S (1979) 30 Trial levels and shafts in Frongoch beds, though no vein known in area.

1" 140 SN 789 490

DALAR-WEN, Llanddewi Brefi, Cardigans.

GWH (1971),76. Trial level for 5 paces NE on a 4 ft quartz vein, in valley bottom below Dalar-wen farmhouse.

JRF-S(1979)91 Unsucc. trial level

DANIELL'S & NANT GLAS LODE;

& DANIEL'S MINE, Upp. Llanbadarn & Llanfih-
-y-Creuddyn, Card.

See ALLT DDU [=DANIEL'S] 7178; NANTGLAS;
RHEIDOL UNITED MINES.

(R) 1" 127 SN 67 82

Parcel Canol

DAREN MINE, ~~Trafeiriog~~ Card (I) (680 832 Level portal 6783,

See also DAREN E. MINE; CWM SEBON MINE; CWMDAREN; CERIGYRWYN MINE; GWAITHYRAFON M.

WWS (1848) With BOG MINE (qv) worked as GOGERDDAN MINES (qv). Formerly a very productive mine (77) p662 Siderite

OTJ (1922) (35) Pb. p71 = GREAT DAREN or OLD DAREN
Main shaft nr. Daren farm. Very old. "Roman" (?) but old when Soc of Mines Royal took over in 1568. Copper ore, lead ore.
pp 134, 145.

= DARREN ~~or~~ DAREN-FAWR = GREAT DAREN

DCDavies (1888) Argentif. galena

J. Williams (1810) "The Nat Hist of the Min Kingdom" Edinb. 2nd Ed, Vol I

Describes a regular & durable lead vein, very rich in silver, "worked by the Romans"

JRF-S (1979) 41-2. Section, p38. DAR(R)EN = OLD DAREN = DAREN UTD.. Ancient, historical mine, worked by Soc of Mines Royal in 1568 also 17th, 18th, 19th Cents. Last closed 1879.

NE vein in lower Frongoch 5-10 ft wide, "very wide" in places.

Old mine worked from shafts around Daren Farm, deepest = FLAT ROD Sh. to 50 fm below adit. This is where S. Daren & Daren V's should meet & where main

DAR(R)EN MINE, Parcel Canol, Card. (II)

oreshoot seems to be. At least 6 sh's here. Adit level ~ 620 ft OD. Shaft names in MJ (1865) differ from those in OTJ (1922) (? renamed).

E part – ancient outcrop wkgs nr British Camp, at 679830. Levels to SW into Coed Daven, lowest = OLIVERS ~ 500 ft OD from 680832; main working level = FRANCIS' ADIT; higher is LEVEL COED.

Lead & copper ores produced.

MJ (1850-66. Section; 13/5/1865)

WJL (1967) numerous refs.

DEB (1976), 3, 10

Bevins (1994) Mimetite

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite, a few specs; thin yellow plates to 0.75 mm on cerussite, or on one spec., or-yell blocky xls on yellow pyromorphite from "DARRAN MINE, Pen-Bont Rhydybeddau"; ident. vis. [S.A. Rust]

S. Rust, BMSN (2004) 67, 2-3 Albite, quartz, muscovite, rutile in alpine clefts.

DARREN E MINE

CWM SYMLOG M., Trefeirig, Card.

See ~~DAREN E~~. MINE 69 83

also GWAITH-YR-AFON MINE 69 83

DAREN S. MINE, Trefeirig, Card.

See CWM SEBON MINE 6883

DE BROKE MINE Upper Llanfihangel y Creuddyn Card.

See DOLWEN MINE ; TY-GWYN M.

7878

1" 127 SN 74 77

DEVIL'S BRIDGE, "Aberystwith," Card.

See FRON-GOCH MINE; CWM RHEIDOL etc;

TMH(1868), 74. Lr. Sil. Cerussite; pyromorphite; quartz.

BM: Pyromorphite, with cerussite on quartz

MA 3 156 By spectroscopy, 2-4 % Germanium(!!) found in massive sphalerite from near Devil's Bridge.
(W. Scutt, Phil Mag (1926) Series 7, vol 1, pp 1007-9.
See also Brewer FM, Gox JD & Morris DFC, Geochim & Cosmochim Acta (1955) 8 131-136 [MA 13 347]) Specimen coll by W. Scutt "from an old lead mine in the neighbourhood of Devil's Bridge" — a dark grey micrcyst lump, with little lustre. Relative

intensity of the Ge lines of a germanite was 1:2, with equal exposures. ∴ 2-4% Ge, "higher than 9% ge in canfieldite"!!

A. Milter MSc Thesis (U.M.I.S.T).

Analyses by XRF of numerous sphalerite from dumps in an ~ 3mile radius from Devils Bridge showed no anomalously high Ge values and no noticeable trends in Ge values along any vein system or between vein systems.

1" 127 SN ~~66 92~~ 659 919

DOLCLETTWR MINE, Llangynfelyn, Card (I)

= TRE'R DDOL = TREDDOL

= LLAINHIR MINE | See also PWLL ROMAN; NEW BOG; LLANCYNFELYN; TAL-Y-BONT etc.

OTJ (1922) (38) DOLCLETTWR M. Zn/Cu/Pb. 137: A shaft at 90' OD on E side of main road ca 300 yds S of Treddol village. Blende, chalcopyrite, galena.

Has been confused with PWLL ROMAN MINE, 1/4 ml to the S.

DC Davies (1888) "TRE'R DDOL" — The galena has not much Ag; a little sphalerite; a good mass of chalcopyrite was found. [Could be New Bog mine, qv]

WWS (1848) TRE'R DDÔL MINE, working, (No 103)
[which places it near NEW BOG MINE qv]
A lode of rich chalcopyrite

JRFS (1979), 24. DOLCLETTWR = TREDDOL =
TRE'R-DDOL = LLAINHIR. SN 659919
NNE calcite vein cementing breccia,
with much sphalerite & chalcopyrite,
some galena. Prob a contin of the Tyn-
y-Wern V. In Gwestyn shales.
Level to E 135 ft to 7-9 ft vein.
Shaft to E of main road to 48 ft below
level. Discov. 1849; closed 1856

DOLCLETTWR MINE, Llangynfelyn, Card. (II)

John Williams Catal (Winter, 1994)

Cuprite, small cubes and modified cubes, scattered on slaty matrix + LODGE PARK COPPER TRIAL, Tre'r-ddol.

Ullmannite, DOLCLETTWR M. (checked XRD, NMWales) massive, grey, irreg. fractured aggregs in quartz.

DOLGOCH, Ysgubor-y-coed, Card.

See YSTRAD-EINION M. 70 93

1" 127 SN 773 735

DOLOGAU MINE, Ysbyty Ystwyth, Card.
= PONTYSTWYTH = NEW LOGAULAS M
= HAFOD M.

JRFS (1979) 78 DOLOGAU = PONTYSTWYTH = NEW LOGAULAS, 773 735.

Trials referred to in Min. Journ reports 1856-7 under names "HAFOD" & "PONTYSTWYTH". Shaft sunk 1856 to ~10 ft vein at 10 fm level also surface pits. Hafod Lead Mining Co. formed in 1857 but nothing further done. Lead ore reported.

1" 127 SN 780 783

DOLWEN MINE, Upper Llanfihangel y Creuddyn, Card 774 776

?= DE BROKE MINE ? = PENCORBED

See also NANT RHUDDNANT, TY-GWYN, MYNACH VALE (= MYNACH VALE)

OTJ (1922) (39) Pb p136-7. On spur between Myherin and Mynach Valleys, at nearly 1400' OD. No road near, access difficult, but fairly high output for several years. = DE BROKE M [BUT v. infra]

Shafts on summit, shallow adit.

Nant-Rhuddnant Workings also ½ ml away near R. Mynach - old shafts & an adit (870'OD). Lode then enters TYGWYN property on S of stream.

Lead-ore. Near river much blende and chalcopyrite, with calcite - these are absent on summit.

JRF-S(1979) 63-4. DOLWEN M. on NE vein in Frongoch, along crest of Pen Corbed. Access diff. Shaft on vein; shallow adit. Developed by the South Wales Mining Co 1850-58; retried 1863, 1865. OTJ(1922) equates it with DE BROKE M., but MJ reports (1856-8, 1863, 1865) that not so; DE BROKE being = MYNACH VALE M. Lead ore recorded.

RSN(104)20. Field trip. Has produced rich malachite & cuprite but poor today Also found cupy, gal, chalcocite; a small spec. of brown pyrom micro-xs w. malachite. On N side of river

1" 127 SN 763 882

DROSGOL, Trefeirig Card. (I)

WWS (1848) Ndr wkg. "CAMDWR e DROSGOL" on same lode as LLECHWYDD HÊN, LLECHWYDD HELIG, LLANWR Y CWM, e BWLCH Y SIYTLEN (q.v.), which bears galena e blende. (80)
At Drosgol, manganese ores.
p662 Mn oré is psilomelane. "from the old levels on the hill".

OTJ (1922) 26. On E side of Drosgol, some psilomelane from one or two adits

JRF-S (1979) 48. Trial level to SW on CAMDWR V., in Van, at ~ 1560 ft OD at remote spot, road access cut off by reservoir.

BMS N'let (2001) 60, 6. Chalcophanite xls in rusty-looking gozzan (T. Cotterell).

Cotterell (2009) J. Russ. Soc. 12, 15-25. Details, history etc. of Mn mine. Mn ore typically black veinlets in mudstone & lumps with dull core overgrown with lustrous blue-black metall platy xls. Lit referred to as "psilomelane". Mostly = lithiophorite eg at SN 7641 8833 ~~dso~~ micro inclusions of galena & monazite. Others are

DROSGOL, Trefeirig, Card. (II)

chalcophanite, platy x/s. Inconspic layers of radiating ramsdellite between these & cryptomelane cores. Also goethite

DYFFRYN CASTELL MINE Card

See CASTELL MINE 77 80

EAGLEBROOK MINE, Ceulanymaes mawr, Card.

See NANTYCAGAL MINE 73 89

EISTEDDFA-FACH, Cwmrheidol, Card.

See NANT-NÔD M. 7983/4

EISTEDDFA GURIG, Card.

See NANT-NÔD M. 79 83/4

1" 127 SN 685 861

ELERCH, Ceulanymaesmawr, Card.

JRF-S(1979) Trial shaft in Frongoch beds in line with Penycefn vein (nearest working on which is ~1½ ml to SW).

1" 127 SN 662 860 (also 6586)

ELGAR MINE, Cwlanymaesmawr, Card.

OTJ (1922) (41) Pb/Zn. (Total 4 tons each!), but v. infra.
138: Most W mine on HAFAN lode. 1¼ mls W of Eletch. Shaft & an adit (490'OD), draining shaft to 30 fms. Adit E ward on lode. Said to be productive but no returns prior to 1889, since when only 4 tons Pb ore.

JRFS (1979) 31-2. Most W mine on HAFAN V., here a little N & E & fairly high in Frongoch beds. Trials further W at 658861 & 653861 do not seem to have

found the vein.
Crosscut level to N at ~ 490 ft OD
e shaft on vein to level at ~ 100 ft
e to 20 fm below adit. 2 veins cut.
4 tons Pb ore produced ~ 1888-1890.

BMS Newsl. (1997) 47, 3. BMS Coll. D. Green: Wulfenite

RSoB 99-137 (BMS Sympos) Ullmanite.

Cotterell et al J Russ Soc (2003), 8, 33-34
Brianyoungite from deep adit dumps
at 662 860

ELLA MINE, Ysbyty Ystwyth, Card.

See HENDREFELEN MINE 7169

1" 127 SN 65q 90s
Llangynfelyn and 65 7 903
ERGLODD MINE, Ceulanymaesmawr, Card. (I)

See also PENYBANC and PENPONTBREN, RHYD-FACH

WWS(1848). "Ore being taken from a small shaft" Old workings in the wood above. (97)

OTJ (1922) (42) Pb/Zn 138: Shaft on E ridge E of Erglodd farm, ca 3/4 mE N of Talybont, and a shallow adit (370'OD). Lower adit ca 180'OD has pyritous lode stuff on dump but main lode prob. not reached. Large lumps of pure lead-ore found in trenching operations. Lead ore; blende

p22: 3 lodes.

WJL (1967)[196] Lakels this mine "Erglodd (Erw Tome)" on map, p. 170. [cf Erwtomau M, SN 700 783]

JRFS (1979) 26 = EURGLAWDD. Small EW & ENE veins in Frongoch worked by shaft on ridge & levels from both sides of ridge. Said to be ancient; reopened 1850 Last closed 1883. Lead & zinc oxes

MJ (1850-52)

DEB (1976), 3, 39.

John Williams Cat. (Winter, 1994). Siegenite, small granular to veline aggregs, rich in quartz with chalcopyrite

ERGLODD MINE, Llangynfelyn/Ceulanymaesmawr, Card. (II)

Ixer & Stanley (1996) MM 60 978. Siegenite, anals from Mason (1995) M Phil Thesis, Univ of Wales, Aber. $(Co_{0.88}Ni_{1.66}Fe_{0.52})S_4$ and $(Co_{0.95}Ni_{1.42}Fe_{0.67})S_4$

1" 127 SN 700 78?3

ERWTOMAU MINE, Upper Hanbadarn y Creuddyn. Card.

See also RHEIDOL UTD MINES, RHIW RIGAS LODE. CWM RHEIDOL etc; = RHIW RIGAS + GWAITH GOCH

OTJ (1922) Zn/Pb. p102. "Part of workings on RHIW RUGOS LODE" Blende, galena

OS 2½" map shows "Erw-tomau" house at 700 781

WJL (1967) Labels ERGLODD MINE (SN 659 905) "Erglodd (Erw Tome)" on map, p 170.

JRF-S (1979) 58-59. ERW-TOMAU MINE was combin. of RHIW RUGOS [See RHIW RIGAS] and GWAITHGOCH MINE, worked unsucc. 1915-16.

1" 127 SN 768 696

ESGAIR DDU, Upper Gwnnws, Card.

WWS (1848) (13) Not wkg.

JRF-S (1979) 84 Old workings at NE end of Esgairmwyn vein. reopened in 1856, when "large quantities of cerussite" were found. Nothing done since MJ 1866 (in reports on Esgairwoyn M.)

DEB (1974, 1976) 1 34; At 768697. Worked by Ball v 1768. Tried in 1857 by driving an adit, neglected since. Very inaccessible.

ESGAIR FRAITH MINE, Ceulanymaesmawr, Card

See ESGAIR VRAITH 7491

1" 140 SN 667 538

ESGAIR GADFACH MINE, Llanddewi Brefi, Cardigs.

& RHYSGOG GADFACH.

GWH (1971) 69-70. AF(1874) says in v. exposed position, high up, started ca 25 yrs previously. Prospectuses, & WD (1815) map show it is the small mine crossed by the road at 667 538. N of road a shaft & a blocked adit. S of road, trials, shafts. Lode WNW, dips N.

WD (1815) says discov. ca 1775.

A strong rib of lead reported at bottom of 14 fm shaft.

JRF-S (1979) 86. Vein a little N of E in Frong. Shafts on both sides of moor road at ~ 1150 ft OD. Active 1856-7. Flooded 1859. Vein 3½ ft wide spotted with "silver-rich" galena mixed w. much sphalerite. MJ Reports on Llanddaoibrefi M/s 1856-9.

1" 127 SN 735 914

7291 7391

ESGAIR HÎR MINE & LODE, Ceulanymaesmawr, Card (I)

See also ESGAIR VRAITH (FRAITH).

WWS (1848). "Working" lode, with several branches. (115)
very large & occasionally productive lode.
p660. Calcite enclosing ores.

(20-21, 49-53, Plate IV)

OTJ (1922) (44) Esgairhir & Esgairfraith Pb/Cu.
p.49 A plan of 1698 shows six veins of lead ore & two of Cu ore, parallel. Two two mines often worked together under the names of WELSH POTOSI, CARDIGAN CONSOLIDATED, or CAMBRIAN MINES. Esgairfraith mostly Cu.
p20ff. Map facing p 20. Galena

PT (4/68); RSIOB (5/68) galena; chalcopyrite; quartz; langite; brochantite; linarite; leadhillite; malachite, cerussite;

PT (?/68) On dump at bottom of sett (Towards E-Vraith) traces wulfenite on thin coatings of pyromorphite.

RSIOB, PT (1/69) V, 130 This (wulfenite) dump now bulldozed away Thin pyrom on quartz only

JIWilson 7/78. Vg langite etc, also hemimorphite, vg leadhillite

DC Davies (1888) The Esgair Hir e adjacent mines, now known as the CAMBRIAN MINES were discov. in 1690. Lead, zinc, copper ores, e large nbs calcite

Sulphur on galena

ESGAIR HÎR, Ceulanymaesmawr, Card. (II)

JRFS(1979) ESGAIRHIR = CAMBRIAN = CARDIGAN CONSOLTED = WELSH POTOSI = KYLON POTOSI. Pages 19-20

Main shaft 734 913. W end of adit 729 910
E end of adit 739 912..
Plates IV, V, VI are photos.

Worked generally w. ESGAIRFFRAITH
Vein a little N of E here: massive quartz cementing brecciated country rock, with ribs & shoots of ores: galena (said to be up to 6 ft wide); sphalerite common; Old reputation as rich Ag mine not borne out; one aver only ~ 7–9 oz/ton Ag.

(MJ (1850-65) numerous reports).

Adit surfaces at both ends, goes right through workings; at ~1360 ft OD at E end. WHIMSEY SH. to 30fm below adit (165 from surf); ENGINE SH. (= SH. GLAS) to same depth, from 300 ft N of V. outcrop. Finally closed ~1904. In Frongoch rocks. workings do not join w. ESE & VR.

WJL (1967) Numerous refs.

FJN (1962) 44

DEB (1976) 3 53 et seq.

ESGAIR HÎR, Ceulanymaesmawr, Card. (III)

S. Rust (1985) BMSNewsl. 13 "Esgair Hir, Wales"

May M Wirth, Priv comm 24/7/87
Caledonite (microchem)

R. Bevins (Priv Comm 6/88) Mattheddleite has been found, according to D. Green – "all destroyed in the analysis".

SA Rust & J.S. Mason HHJ Mineral Mins (1988) 5 35-43
geol, history. Primary paragenesis – refl. light microscopy etc; many supergenes.
Anglesite, antigorite, bournonite, brochantite, calcite, caledonite, cerussite, chalcopyr.,

chrysocolla, co-pentlandite, covelline, cuprite, dolomite, elyite, galena, gudmundite, hemimorphite, hydrocerussite, hydrozincite, langite, leadhillite, linnaeite, malachite, mareasite, mattheddleite, millerite, phlogopite, pyrite, pyromorphite, quartz, serpierite, smithsonite, sphalerite, susannite, tenorite, tetrahedrite, ullmannite, violarite, wroewolfeite, wulfenite. Several unknowns incl. Cu e Zn OH sulphates e a poss. Pb, Cu silicate. ? chlorite, chalcocite? [Is the "linnaeite" really = siegenite as elsewhere?]

ESGAIR HÎR MINE, LODE, Ceulanymaesmawr, Card. (IV)

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite, corrod. orange-brown bipyr. on thin coatings green microxl. pyromorphite on qtz & mudstone on dump S of SHAFT ISAF [7351 9126]. Ident. vis. (Rust & Mason, 1988). V. rare.

RSN (1998) 33, 18. Nothing new
RSN (2000) 37 19. Nothing new
RSN (103) 42 27 Much cerussite

Saturday: Esgairhir and Esgairfraith Mine sites RSN (1991) 22

The weekend attracted 18 members. However, Saturday did not prove to be a very good start weatherwise, the low cloud producing damp conditions over the whole area all day. However, grumbles aside, the minerals collected included hemimorphite, malachite, linarite and pyromorphite plus the usual sulphides and several good specimens of chrysocolla.

S. Rust BMSN (2004) 67 2-3. Chlorite, muscovite & quartz in alpine clefts

M. Cooper et al (2009) MM 73, 235-250
Steverustite, 6 samples.

ESGAIR LLE LLU, ~~Cwmrheidol~~, 1" 127 SN 790 828

ESGAIR LLY, Cwmrheidol, Card (I) 791 827

See also GT. W. VAN MINE, HIRGOED DDU; OLD ESGAIR LLE

?= Esgair Llu of OS 6" map? at 790828

WWS (1848) Bryn-glas lode (qv) working on a small scale at "Esgairlly", with cross strings. (61) Pyrite in prismatic xls in stellate groups. ~~Blende~~

RSWB, ~~Min~~, T&. Vol II, p88 (4/8/62) Esgair Llu mine of OS 6" map, at SN 792827, ~~Cwm~~ Cwmrheidol PH. Big dumps of limonitic shale, blende; galena; tr. chalcopyrite; tr. cerussite; drusy quartz; calcite

OTJ (1922) (43) ESGAIR LLE & Gt. W. VAN. Pb/Zn.

p92 Two mines OLD ESGAIRLLE on E slope of valley ca 400 yds N of Cwmergyr farm, other by main road on other side of valley – GT. W. VAN. [NOT on Van lode]

~~OLD ESG: 4 adits, 2 open, one unenterable & one at ca 1250 ft OD, on N. lode, opens directly into stopes. Ochre; pyrite; marcasite.~~

~~GT. W. VAN [qv]~~

WJL (1967) Map, p 170 { The W mine. p 183
The E mine (GT W. VAN)

JRF-S (1979) 50-51 ESGAIRLLE = GT. W. VAN, SN 791827
Worked with OLD ESGAIRLLE, SN 796829
On same V's, a little N of W, branched from

ESGAIRLLE, Cwmrheidol, Card. (II)

Castell V., in Gwestyn; crossed in this ^ W sector by a NE vein. Deep adit, 980 ft OD, another at 1040 ft OD. Old workings higher on hill V. old – old tools found when reopened in 1850. Engine Sh. betw. the 2 veins. Renamed GT. W. VAN M. in 1873. Lead & zinc ores returned; ~~close~~ last closed 1892.

MJ (1850-7)

DEB (1976), 3, 8.

OTJ (1922) 94 Pb By main road. Two

lodes outcrop within loop of road. Several adits. Lode-stuff = gwestyn breccia cemented by quartz & calcite, with galena & a fair proportion of blende. A good deal of bre on dumps.

1" 127 SN 796 829

OLD ESGAIRLLE, Cwmrheidol, Card.

See also ESGAIRLLE

OTJ (1922) Pb/Zn mine (43) ESGAIRLLE e Gt W VAN.
p92 Two mines; OLD ESGAIRLLE on E slope of valley ~400 yd N of Cwmergyr Farm. OLD E:- 4 adits 2 open, one unenterable, one at ~1250 ft OD, on N lode, opens directly into stopes. Ochre; pyrite; marcasite

JRF-S (1979) 50-51 4 levels on 2 veins, close e 11[e]
A shaft on a 3rd V. to S. Pre-1850

WEST ESGAIRLLE MINE, Cwmrheidol, Card.

See CASTELL MINE 77 80

NB. CASTELL MINE itself, also a copper-bearing shaft ½ml to E, also known as W. ESGAIRLLE [OTJ (1922) 94]

1" 127 SN 755 692 (Old) 752 689 (New)

ESGAIR-MWN (Y) MINES, Upper Gwnnws, Card. (I)

See also LLWYN LLWYD MINE

OS 1" map. Lead mines

DC Davies (1888) ESGAIR-Y-MWYN M.

WWS (1848) (12) "Workings lately resumed" On same lode as LLWYN GWYDDYL

OTJ (1922) (45) Pb/Cu/Zn. p126: In the grant of the Crown. Discov. ca. 1751-2. Lead-ore, quartz. Silver content of galena increases markedly with depth. Older part to E. newer part worked from shaft to 145 fm below deep adit. Levels at 15, 25, 35, 48, 60, 70, 80, 90, 102, 114, 125, 135 & 145 fms. One body

widens downwards & is distinct from that in older mine, & 70 & 102 fm levels driven under old mine shoots without success. In driving 102 fm level to W, a X-course was cut ca 90 fms W of the shaft, with large open vughs, & in driving S, one of these partly flooded the mine.

Lode strikes WSW & continues into an old mine called LLWYNLLWYD or SOUTH LISBURNE, where tried by a shallow adit & several old shafts.

Lead & copper ores & blende returned from Esgairmwyn

JRFS (1979) 83 ESGAIRMWYN, NEW MINE SN 752 689; OLD MINE, SN 755 692

ESGAIR-MW(Y)N MINES, Upper Gwnnws, Card. (II)

(JRPS (1979)): Vein ~ ENE in Frongoch beds.
17th Cent → 1810; 1851 intermitt → ~1927
Old Mine (NE of New Mine) extensive with large early opencut. Deep adit ~1100 ft OD from near New Mine. Worked to 77 fm level. New Mine:- Shaft on vein to 145 fm, sumps further to 165 fm. Unusually Ag increased w. depth - average ~12 oz/ton Pb ores but up to 22 oz/ton in lower workings. Lead & zinc ores recorded MJ 1951-9.

WJL (1967) 101

JEB (1974, 1976) 1, 32.

Russ. Soc. Newsl. (1991) 21

Mid-Wales Weekend 14th - 15th July 1990

Saturday: Twelve members and a few visitors met in the village square at Ysbyty Ystwyth at 11.00am, where, under the leadership of Neil Hubbard, we travelled two miles to the south-east to the Esgairmwyn Mine which was worked until 1927 for zinc, lead, copper and silver.

On arrival at the mine site, Neil gave a short account of the mining history followed by a tour of the dressing plant, and explaining the various stages in the operation of the froth-flotation plant used in the extraction of lead and zinc concentrates obtained from the extensive spoil heaps which surround the mine site. Due to problems with water pollution, the processing plant was not being worked during our visit.

Some nearby open pits were examined. The usual copper, zinc and lead sulphides were present, and cerussite was also recorded.

1" 127 SN 709 817

ESGAIR NANTYRARIAN M., Melindwr, Card.

See also SILVER STREAM M.

JRF-S(1979)52. Unsucc. trial sh. in lower Frongoch, at 709 817

1" 127 SN 74 044 918-3

ESGAIR VRAITH MINE, Cwlanymaesmawr, Card (I)

=ESGAIR FRAITH | See also ESGAIR HIR, cf NANTYCAGAL LLUEST-GRAFIA

GeL, (1858) Chalcopyrite, Esgair Vraith mine

OTJ (1922) (44) Esgairhir & Esgairfraith Pb/Cu.
49: with Esgair hir often worked together as WELSH POTOSI, CARDIGAN CONSOLIDATED or CAMBRIAN MINES. Esgairfraith mostly Cu ore.
p20. Map. p21 Chalcopyrite, calcite, siderite

RSWB (5/68) V, 115. Matrix of cleavable massive siderite: chalcopyrite; aragonite (spiky, like that from Frizington); malachite;

brochantite; langite xls (ψ-hex, minute);
trace linarite; hemimorphite; ??aurichalcite.
– this does not effer w. H_2SO_4 & is v. low in Zn
~~[illegible]~~ (NH_4 mercurithiocy test) & is ∴ devilline

RSWB, PT (1/69) V 130. Serpierite (with appreciable Zn)
on ?dolomite (?ankerite)

OS 2½" map also shows "level" at SN 750 913, by
Lluest-grafia, around the hill-spur
from Esgair Fraith & probably on the
same lode.

Abandoned Mines Plan No. R. 158 is of "Welsh Potosi & Esgair-
fraith Mines"

ESGAIR VRAITH M., Ceulanymaesmawr, Card (II)

JRF-S (1979) 21. Same alternative names as ESGAIR HIR, with which mostly worked. Main = BOG SH., at 742 912 to 378 ft (240 ft below deep adit). Undergrd wks not connected w. ESG. HIR workings; one shoots at lower horizons so miner. different: in bottom Frongoch e in Gwestyn rocks (V's in Gwestyn usually have Zn, Cu > Pb). Calcite, cementing brecciated rock, much chalcopyrite; sphalerite; some galena.

Deep adit at 1320 ft OD. Closed 1904

MJ (1850-65) numerous reports.

FJN (1962), 44.

WJL (1967) numerous refs.

TMT (1961) 220

DEB (1976) 3. 53.

S.A. Rust e J S Mason (1988) "Rock Bolt" UKJMM 5 35-43

Esgair Hir. geol, hist, mineralogy. From E. Fraith mentions mitterite, ch'pyrite, pyromorphite, wulfenite.

ESGAIR VRAITH M., Ceulanymaesmawr, Card. (III)

(Rothwell & Mason (1992) UKJMM II 30-40 Wulfenite, very rare; brownish bipyr. to 0·5 mm on yellow-green pyromorphite on pale grey mudstone; a few from dumps of BOG SHAFT 7400 9125, one from dump by COPPER SHAFT, 7440 9115. Ident vis.

RSN Letter (1991) 22
"E-HIR AND E-FRAITH M": Malachite, pyromorphite, Hemimorphite, linarite, chrysocolla, "sulphides".

RSN (1998) 233 18. Usual + "dolomite"

RSN('03) 42. 27 Visit, 6/02. Millerite found.
Hemim. calcite x/s, chpyr, sphal, galena.

ESTYMTEON, Cwmrheidol, Card.

See YSTUMTUEN 7278, 7378

1" 140 SN 65

FACH DDU MINE, Llanfair Clydogau, Card

See ~~Llanfair Clydogau~~
NANT FACH DDU 62 50

~~WJL (1967)~~ Map. p 237 ~~Lead mine~~, S SE of LL. Cl.

1" 127 SN 826 813

FAGWR-FRAITH, Upper Hanfihangel-y-Creuddyn, Card.

JRF-S (1975) 56. Trial level to SW in Frongoch beds, prob. for any NE contin. of Nantycreiau Vein.

FAIRCHANCE M., Upper Gwnnws, Card.

See LLWYN LLWYD M. 74 68

1" 127 SN 551688

FFRWDD, Llanrhystyd Haminiog, Cardiganshire

GWH (1971) 64-5 Open adit on SW bank of Wyre Fach ca 3/4 ml above Llanrhystyd; for 65 paces mostly on an EW lode with only a little pyrite & clay, but 4 small stopes & an 1854 report refers to lead [ore] Old reports of another level 8 fm apart from this one at surface; now hidden by debris These trials in early 1850's.

JRF-S (1979) 81-2 Trial, only ref seen is an

FFZRWRD

advert in Mining Journal of 19 July 1851 for its sale – in which reports a X-cut for 120 ft to cut the vein, on which a drift driven 42 ft. Vein E-W, with lead ore

FLORIDA MINE, Upper Gwynnos, Card.

See ABBEY CONSOLS MINE 74 66

WEST FLORIDA M., Caron-uwch-clawdd, Card.

See CARDIGAN S. BOG M. 7365

1" 127 SN 710 786

FOXPATH MINE Upper Hanbadarn-y-Creuddyn, Card.

See also RHEIDOL UTD. MINES etc.

OTJ (1922) Pb/Zn p.102 To W of the NANTGLAS workings, a long adit - the FOXPATH crosscut, to Nantglas lode. Nothing known of workings.

JRF-S (1979) 58. Part of RHEIDOL UTD. M's.
Long crosscut from 710786 to S to Nantglas Vein at ~300 ft OD. to work mines at depth.

Upper Llanfihangel y Creuddyn

FOX'S LODE, Cwmystwyth, A Card.

See CWMYSTWYTH, COPA HILL, & KING-SIDE WKGS.

= NEW LODE, one of the PENGELLAN LODES

1" 127 {Upper Llanfihangel y Creuddyn} Cent. on Adit from SN 722 744 714 742

FRON GÔCH MINE {Card. (I)}

See also FRONGOCH W. MINE; LL

OS 1" map. At 725 744

G&L. (1858), 392. Cerussite [Pyromorphite, lately in brilliant translucent hair-brown x/s on quartz, much resembling the variety from Bleistadt, Bohemia, at a mine near the Devil's Bridge]

AWGK Rep Comm in GR's G&L: Brown Pyromorphite – this is the "Devil's Bridge" loc.

WWS (1848) "Working" of the LISBURNE MINES (qv) Lode (21) with GRAIG GOCH & CWM MWYDION. Large deposits of galena & blende

RSWB, TG 6/8/62. Vol II pp 95-96. Pyromorphite, green to brown;

excellent cerussite; galena; quartz; blende; limonite; chalcopyrite; malachite; linarite; langite (x-rayed - BM) calcite.

RSWB, TO, GR, OS 30/3/63 Vol III pp61-62. As above + pyrite; yellow powdery bindheimite with galena. [BM X-ray]

OTJ (1922) (46) Zn/Pb/Cu. p.105. Discovered ca 1798, as "BRON-Y-GOCH" - lead ore, blende, quartz. ca 3 yrs later, immed. to E, LLWYNWNWCH MINE found, - blende, lead ore, + quartz. Combined as FRONGOCH. WEMYSS or WEST FRONGOCH on same lode, to W, but separate. Mine drained by adit driven E from side of the road in the CWMNEWYDION valley, through the ↘ ca 50 yds E of the road.

FRONGOCH MINE, Upper Llanfihangel y Creuddyn Card (II)

W. Frongoch property, to the 24-fm level. Many levels - down to 142 fms.

Adit portal ca 50 yds E of road in Cwmrheidol valley ca on footwall of main lode, to E for ca 150 fm then turns sharply NE ca 25 fm then E again on a lode.. Pb ore - Ag 2·5 oz/ton

RSMB, (1/68) V, 99 (5/68) V 113 Leadhillite (IR) small hex. plates; brochantite (IR); pale blue-green trigonal-looking prisms ⁂ grading into feathery tufts.* BM X-ray - unknown Cu sulphate found once before on the coating of a Roman brooch. Yellow powdery bindheimite (X-ray, BM) BUT SEE (IV)

* P.T.O.

FJN (1962) 70 Worked for 59 yrs.

RSWOB 4/80 * Microchem tests on 2 tiny samples of pale blue-green ~~feathery~~ needles assoc. w. leadhillite: In dil HCl, efferv. ∴ CO_3^{2-}, & turns white & opaque without a lot dissolving. Evap → needles $Pb^{?}$. Re-diss; added $BaCl_2$ → white xline ppt ∴ SO_4^{2-}. Added ammon. mercurithiocy. → a few apple green x/s; no purple ∴ Cu^{2+}, little or no Zn^{2+}. Seems to be a Pb, Cu sulphate-carbonate. cf wherryite. SEM/electron probe (5/80). Z > 10 [Pb & S lines overlap] Only either Pb : Cu (4 : 1 atomic) or Pb : Cu : S (~ 3 : 1 : 1 atomic).
IR (5/80) = caledonite

FRONGÔCH MINE, Up. Llanfih.-y-Creuddyn, Card. (III)

JRF-S(1979), 66–68, Plate III (photo). One of largest & most successful mines in area. First discov. & worked 1798 as "LLWYNWNWCH M." in the E part of the main later workings. Worked intermitt. → 1903. ENE ~~F~~RONGOCH VEIN in upper Frongoch beds; 20–30 ft wide but econ. orebodies sep'd by barren "horses" of crushed country rock. Sphalerite on walls, galena in centre of vein.

Adit driven E on vein at 650 ft OD from SN 714 742 through ~~FRONGOCH~~ WEMYSS M. to reach FRONGOCH. M. at 24 fm level. Shafts: Engine to 117 fm; PRYSE'S, to 105 fm; VAUGHAN'S to 142 fm;

a later sh. to S & vein reaches V. at 90 fm. Levels down to 142 fm.

Galena & values declined with depth but sphalerite persists. Richest near Vaughan's Sh. for 720 ft to E, but productive along 4800 ft. Two branches - "N" & "S", sphalerite richest along footwalls. From 1834-1903 produced 56,095 tons Pb ore & 50,856 tons Zn ore, & dumps reworked since. MJ (1850→).

WJL (1967), 110-111.

DEB (1974, 1976) 1, 13.

FRONGÔCH M, Upper Llanfihangel-y-Creuddyn, Card (IV)

Beryl Taylor informed RSNHS 8/92 that the colourless hex. plates ["Leadhillite" of RSNHS (1/68)] has been ident. as susannite & gave RSNHS a spec. [92-114] visually ident as such by Mike Rothwell NB. Susannite & Leadhillite have almost identical IR spectra & the old spectrum could have been of either.

Sunday 22 August RSN(1994) 24

Seven members met at Frongoch mine where a large area of the old dumps had been disturbed and yielded abundant veinstone. Cerussite was extremely common and a greasy form of pyromorphite was found as branching groups of prismatic crystals. A week earlier the leader had found a lump of breccia 100x110mm with the country rock cemented by pyromorphite crystals reaching 10mm.

Several good linarite sprays with crystals to 2mm were found. Other species visually identified were:- cuprite, malachite and hemimorphite.

Many microcrystalline 'unknowns' were collected including pearly sky blue plates (schulenbergite?) and colourless, tabular crystals on linarite. Much was collected, and the site is still worth visiting.

Steve Plant

FRONGÔCH M., Upper Llanfihangel-y-Creuddyn, Card. (V)

MINERALS FROM THE FRONGOCH MINE, MID WALES

Steve Rust and John Mason

Following the appeal in Newsletter No. 32 asking for any information on the mineralogy of Frongoch mine, a list of minerals can now be issued. Some species still require confirmation.

P.T.O

In addition to the minerals in the above table, there are five "unknowns" which, to date, have defied identification by XRD. Also, a yellow mineral has been provisionally identified as amorphous cadmium sulphide.

Minerals from the Frongoch Mine

Anglesite	XRD	Elyite	V	Massicot	V
Aurichalcite	C	Galena*	XRD;EM	Mattheddleite	EM
Bindheimite	XRD;IR	Goethite	V	Namuwite	XRD
Brochantite	XRD	Hemimorphite	V	Pyrite	V
Calcite	V	Hydrocerussite	XRD	Pyromorphite	XRD
Caledonite	XRD;IR	Hydrozincite	V	Quartz	V
Cerussite	XRD	Lanarkite	XRD;EM	Ramsbeckite	EM
Chalcocite	V	Langite	XRD	Rosasite	XRD
Chalcopyrite	V	Lautenthalite	V	Schulenbergite	XRD
Chlorite group	V	Leadhillite	XRD;EM	Serpierite	XRD
Chrysocolla	V	Linarite	V	Sphalerite	V
Copper	V	Litharge	XRD	Sulphur	C
Covellite	V	Malachite	V	Susannite	XRD
Cuprite	V	Marcasite	V	Ullmanite	V
Dolomite	V			Wroewolfeite	XRD

Note: XRD = X-ray diffraction; EM = electron microprobe; IR = infra-red; C = wet chemical; V = visual. *Both hypogene and supergene galena have been identified.

BMS Newsletter 39: 18 (1994)

FRONGÔCH MINE, Upp. Llanfihangel-y-Creuddyn, Card (VI)

MA 97M/2275

D. Green, S Rust, JS Mason (1996) UKJMM I, 29-38. "Classic Brit. min. locs: Frongoch M., Dyfed". Closed 1903. Brownish pyromorphite, & cerussite, bechererite [MA 96M/4595] caledonite, elyite, lanarkite, langite, lautenthalite, leadhillite, linarite, mattheddleite, namuwite, ramsbeckite, schulenbergite, susannite, wroewolfeite, & several as yet uncharacterised species.

BMS Newsl (2000) 56 6-7. BMS Coll, from S. Rust. No 2233 bechererite.

RSN (103) 42-27. Visit (6/02). Now dumping ground for sawdust & motorcyle track at weekends. Found; much cerussite rarely brown pyrom, susannite & schmiedeberite [? – reported Lynda Garfield, leader Tom Cotterell]

Cotterell et al (2003) J. Russ Soc 8, 33-34
Brianyoungite

F. Hawthorne (2008) IMA 2008-021 New spec
$Pb_5 Cu^{+} S_2O_3 (OH)_5 . 1.67H_2O$. steverustite
(in slag?)

1" 127 SN 730 746

EAST FRONGOCH M., Up. Llanfih.-y-Creuddyn, Card.

JRF-S (1979) 66. Trials, 1853-1858 on ENE Frongoch vein in Frongoch beds. Adit on vein, shaft to 30 fm below adit with levels at 10, 20 & 30 fms. Ground very wet. Strong vein with galena, sphalerite & some chalcopyrite in quartz & calcite. Abandoned 1858 with no output recorded, though. MJ (Aug 1853 - March 1858).

OTJ (1922), 106.

1" 127 SN 708 742 715 742

FRONGOCH WEST MINE, Upper Hanfihangel y Creuddyn Card. (I)

and WEMYSS MINE

FR. W 709 743
WEMYSS 716 742

See also FRONGOCH MINE

OTJ (1922) (47) Zn/Pb. p. 109 on Frongoch lodes, with Frongoch adit

E to W of Frongoch mine. Mutual drainage adit. Workings lying E of the road from Pontrhydygroes through Cwmnewydion = WEMYSS; while W. FRONGOCH workings are near junction of two streams S of Cwmnewydion Uchaf, E is 500 yds W of adit mouth of Wemyss mine, but no connection between the workings.

A shallow adit, before 1854 driven E from the stream S of Cwmnewydion Uchaf cut 2 lodes

ca 3 fm apart: S, main, lode opened for 40 fms, & N lode for 25 fms, & in both were gossan, loose spar & clay & large lumps of lead ore. Subsequently worked E ward by a shaft to one lode, but yield poor. Lode in adit mouth cherty, with some pale blende.

RSWB, TBG, GR, GS (3/63), GR, GS (4/66).

WEMYSS MINE, around SN 715742 Honeycombed quartz, sphalerite, galena on dumps.

WEST FRON GÔCH M, around SN 708, 742. Now almost barren shale dumps

FRONGOCH WEST M., Up. Llanfih:y-Cr, Card. (II)

JRF-S (1979) 68. W. FRONGOCH at 709 743; WEMYSS at 716 742.
Usually worked together, on Frongoch V. to W of Frongoch M.
BOUNDARY Sh. to 66 fm at bound Wemyss/Frongoch.
GLANVILLE'S Sh. (shallow, to adit from S) 300 ft to W.
NEW = BALL'S Sh. to 66 fm.
Oreshoots smaller, more patchy than FRONG.
At W. FRONG. adit driven E from Cwmnewyddion-uchaf; shaft to 16 fm to meet it.
worked 1854–1899, Lead & zinc ores.

DEB (1974, 1976) 1, 16.

1" 127 SN

GABWT LODE, Card.

WWS (1848). Not wkg (117)

NOT in index to JRF-S (1979)

GELLI MINE, Cwmrheidol, Card.

See GELLI'R EIRIN 7079

1" 127 SN 703 795

GELLI'R EIRIN, Cwmrheidol Card

= GELLI MINE | See also BWADRAIN MINE, TYLLWYD; CWM RHEIDOL etc:

WWS (1848): Lately abandoned after raising 60 tons of ore (59)

OTJ (1922) (48) Pb. p 90. On BWADRAIN lode? p.139: Beside road e close to R. Rheidol ca 3 mls below Devil's Bridge. Most work ca 1800. One first found on hillside near head of "the stag" — vein 6' wide. Bonsalls Level (530'OD) under fore feet of "Stag," driven N to lode. Ca 1835 deep adit (210'OD) towards lode from

near road, W of old workings, but not completed for many years.

JRF-S(1979)60. Old, said to rich near surface. Active ~1800 interm → 1859. Bonsall's level, 530ft OD had best ore – the waste dumps form a scree known as "the Stag". Francis' level 2nd 210ft OD driven 1835; connected to higher workings. Vein ~ENE in Frongoch; poor in depth. Old dumps reworked 1850–1859, when much of this ore was cerussite.

MJ (1850–59)

DEB (1975) 2, 32.

GERTRUDE MINE upper Llanfihangel y Creuddyn Card

See BODCOLL MINE 75 76

1" 127 SN 700 784

GEUFRON M., Upper Llanbadarn-y-Creuddyn, Card.

cf GEUFRON M. (MONTGOM.)

JRFS (1979) 57. = WEST IMPERIAL

Small mine, to W. of PANTMAWR, on NANTGLAS V., (a little N of E in Frongoch) Level on vein at ~ 880 ft OD; some shafts further E

OTJ (1922), 102. Mention - no details

WJL (1967), 94, 177.

~~Bevins (1924) 2 Connellite 2 [illegible]~~

GILL'S LODE, Upper Llanfihangel y Creuddyn, Cwmystwyth, 1 Card.

OTJ (1922) 113-7. & E. Continuation of MITCHELL'S LODE. See CWMYSTWYTH and PUGH'S WKGS.

1" 127 SN 752 814

GLAN CASTELL, Cwmrheidol, Card.

JRF-S (1979) 55. Trials on the vein from CLARA towards BRYNGLAS M., a little N of E, in Gwestyn beds. Level to W from beside main road ~ ½ mi N of Ponterwyd e shaft from higher ground to W.

1" 127 SN 709 750

GLAN-DWGAN, Upper Llanfihangel y Creuddyn, Card.

OS 2½" map shows "Old Shaft" at SN 709 750, immed. E of Pond Glan-Dwgan

JRF-S(1979)68. Trial shaft in Frongoch beds; no details.

1" 127 SN

GLANRHEIDOL MINE Card.

OTJ (1922) (HG) Pb/Zn. 139: Identity not known.
73 tons ore returned in 1866 – no other record

GLÔG MINES, Ysbyty Ystwyth, Card.

See GLÔG-FACH, GLÔG-FAWR.

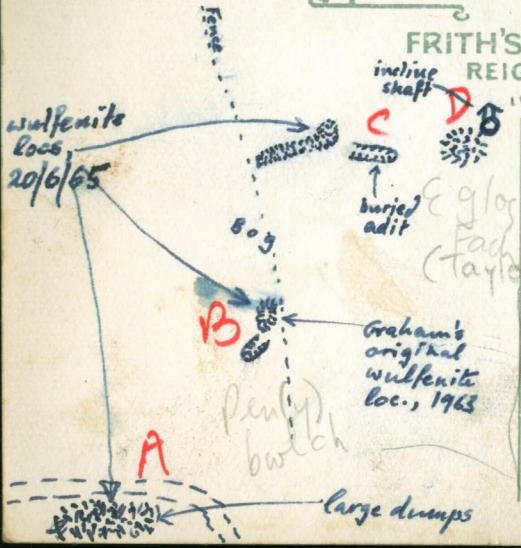

GREETINGS FROM
IRON BRIDGE
THREE BRIDGES
MYNACH FALLS
& HAFOD ARMS HOTEL
DEVIL'S BRIDGE
JACOBS LADDER
MYNACH FALLS

George, Graham, Ray

GLOG M's, Cards

POST CARD

FRITH'S SERIES
REIGATE





OSWESTRY SHROPSHIRE
22 JUL 65

"Wain-Lol" of JRFS

E glog Fad (Taylor)

Dr. R.S.W. Braithwaite,
60 Osbourne Road,
Levenshulme,
MANCHESTER

~~Not in JRFS~~ See GLOG FAWR

1" 127 SN 749 709

GLOG - FACH LODE; Ysbyty Ystwyth Card. (I)

See also GLOG FAWR; GLOG MINES; PENHANFACH M.

WWS (1848) (15) Of LISBURNE MINES (qv) Not wkg

OTJ (1922) (50) Pb. Map, p. 120. Chief development between 1854-1880, mainly from Engine & Skinners Sh's, 64 fm apart. Engine sh → 48 fm, Skinners to 130 fm (bottom) level. Levels 16, 26, 36, 48, 58, 73, 88, 103, 118, 130 fm from surface. Deep adit or level FAWR reached it near 1872 & drained to 118 fm level. E levels reached the gt. X-course, barren here, & no ~~lode~~ one to E. [contrast with GLOG FAWR].

To W, lode branches. A W shaft on N branch to

58 fm level, also reached by a Xcut from main lode at that level. S branch traced by costeen pits at surface for nearly ½ ml & excav's on the slope N of Llethr farm show a lode ranging E for glogfach. Ca 50 yds E of farm a Xcut driven NW ca 125 fm 3 lodes cut; poor. Lodes also traced in PENLANFACH MINE ca ⅓ ml W of the Llethr X-cut.

Attempts to prove ore to E of mine unsuccessful. Ca ½ ml from Engine Sh, & on course of lode, TAYLOR'S or EAST GLOGFACH SH. sunk on a lode dipping N, & an adit driven E to it. Sh to 15 fm below adit on a lode 5' wide with spots of ore. Similar in 15 fm level. At glogfawr, 60 fm level from Davey's Sh driven ca 146 fm E on the N branch of the lode, where a Xcut driven nearly NW to prove glogfach lode at that depth.

GLÔG-FACH LODE, Ysbyty Ystwyth, Card. (II)

At 76 fm a lode cut, e followed E 48 fms, barren. At its E end another X cut 12 fm to N for further proof. The bearing of this lode does not quite agree with glôgfach or E. glôgfach, but no other lode or branch cut. Maybe shifted by X-course?

RSWB, TBG, GR, GS (3/63) III, 58-61 ; 8/65 V, 4.

Main dumps, at 746 708: calcite, ankerite, quartz, galena, traces cerussite, chalcopy, linarite, malachite, brochantite, chrysocolla, "copper pitch"

[GR et al's dump "C"]

Dumps to E, near 754 714: Quartz, a little calcite, galena, sphalerite, pyromorphite cerussite, linarite, dolomite, wulfenite.

GR, GS. Min Mag (1967) 36 457–459. Quartz, calcite, ankerite; galena > sphalerite > chalcopyrite; and on Engine Sh dumps at ~~around~~ 749710, cerussite, pyromorphite, malachite, linarite, traces chrysocolla & "copper pitch". Dump C, 7544 7136 (collapsed adit to Taylors Sh) has bipyramidal wulfenite, calcite, pyromorphite, quartz, galena, chalcopyrite, cerussite,

GLÔG-FACH LODE, Ysbyty Ystwyth, Card (III)

malachite, linarite, chrysocolla, brochantite, "copper pitch". On dumps of Taylor's shaft itself no wulfenite found but pyromorphite & sec'y copper minerals.

JRFS (1979) 78-9 Large mine worked by J. Taylor as "LISBURNE M's" with LÔG-YLAS & GLOG FAWR from 1834 - when already to 50 fm level as had been active from 18th cent. as small mine. In later years LEVEL FAWR extended ~1872

S to drain it, & cut vein at 118 fm lev. ENGINE Sh. to 48-fm lev; SKINNER'S Sh, to 130-fm lev. Levels linked (16 → 130 fm). Vein in Frongoch Formation, a little N of E, one rich oreshoot; poor below 103-fm lev. GREAT CROSSCOURSE cut off oreshoot & nothing of value found to E of it, though TAYLORS Sh., "at 752710" [Error? This would be PEN-Y-BWLCH Sh. on GLOG FAWR LODE. TAYLOR's Sh. is prob. the one at 755 714, GR eGS's dump "D", called WAEN-LOI by JRF-S] sunk to 15 fm below a shallow adit level [GR eGS's "C"?] as unsucc. trial. Trials further E also unsucc.

GLÔG-FACH LODE, Ysbyty Ystwyth, Card. (IV)

Worked until 1889.
p 77. WAEN-LOI – unsucc trials at 755 714 for E extensions of the GLOG lodes.

Min. Journ "LISBURNE M's" reports after 1850

WJ Lewis (1967), 184, 189:

DE Bick (1974) Pt 1, 25:

1" 127 SN 75 2 70 7
747 705

GLÔG FAWR Lode, Ysbyty Ystwyth, Card. (I)

See also GLOG FACH; GLOG MINES

WWS (1848) (14) Of Lisburne Mines (q.v). Not wkg

OTJ (1922) (51) Pb/Cu. p124 Plan [!]. p123: Ca. 300 yds S of GLOG FACH. Mainly worked 1860-1892. Levels reckoned from an adit x-cut @ 1060' OD from a point near the base of the hill 130 yds SE of the Engine Sh. Ca 150 yds further W a shallower adit 1085' OD on a "North Lode". Deep adit or Level Fawr (of LOG-Y-LAS & GLOG FACH) continued S from Glog-fach & a winze sunk below the 75 fm level to the deep adit or "95 fm level". Ca. 1880 a trial of E

end from a shallow adit PENBWLCH or PEN-Y-BWLCH adit, 1180'OD, driven W on lode, to an engine shaft, PENBWLCH or EASTERN SH., sunk to 45 fm level driven E from main workings.

Later a new Davey Sh. sunk nr. lode outcrop, 360 yds NE of the old Engine Sh, to 20 fm below deep adit or 90 fm level. The 12, & 20 fm & those below 60 fm also extended E-ward.

Gt X-course met in all levels - soft ground - used to extend deep adit S from Glog-fach but heavy timbering needed, & expensive to maintain. Outcrop of X course coincides with hollow on surface where is reservoir ½ way between Davey's Sh & old Eng. Sh. X-course had ore at & near Glogfawr lode, which was also

GLÔG-FAWR LODE, Ysbyty Ystwyth, Card (II).

richer E of e near the X-course.
When 45 fm e higher levels driven E from Penbwlch Sh., another, eastern X-course with same direction, cut, but not productive. At 45 fm level consists of great width of crushed e sheared shales.

GR e GS, Min Mag (1967), 36, 457. Galena, subsid. sphalerite, a little chalcopyrite; in quartz, some arkerite, calcite.
Small dump outside X-cut adit at 7479 7048 also has cerussite, pyromorphite,

malachite, linarite, traces chrysocolla, brochantite, "copper pitch". On dumps of PEN-Y-BWLCH or EASTERN Shaft, at 7518 7100 ["Dumps A"), wulfenite as very thin clear yellow rectangular plates or orange-brown translucent elongated bipyramids w. complex curved edges, with yellowish-green minutely x'lized pyromorphite on shale or qtz-gozzan; also quartz, galena, chalcopyrite, cerussite, malachite, linarite, chrysocolla, brochantite, "copper pitch". On small dump "B" at obliter. shallow adit at

GLÔG-FAWR LODE, Ysbyty Ystwyth, Card. (III)

7529 7114, driven on lode towards Ren-y-Bwlch Sh, wulfenite as clear honey-brown thick bevelled plates or orange-brown translucent elong. bipyr's on shale & on cavernous mudstone encrusted with pyromorphite & drusy quartz - other mins rare.

JRF-S (1979) 79. S of GLOG-FACH & worked with it & LOG-Y-LAS as "LISBURNE M's" by John Taylor from ~1834. Older workings at W end. Actively worked 1860-1892, Level FAWR being driven to it in 1872 - at 90-fm level

Vein a little N of E; crossed in centre by NE GREAT CROSSCOURSE which carried some ore in this mine (but barren to N). ENGINE Sh., vert to 20-fm, on vein-dip to 90-fm lev. PENBWLCH or EASTERN Sh. to 45-fm lev., DAVEY Sh, vert → 110 fm lev. Closed 1917. Orebody for ~ 3000 ft along vein.

WJ Lewis (1967), 189:

D. E. Bick (1974) Pt. 1., 25:

GLOG-FAWR LODE, Ysbyty Ystwyth, Card. (IV)

Max M Wirth, - Priv Comm 24/7/87
Caledonite (ident microchemically)

Rus. Soc. Newsl. (1991) 21

After lunch, the party moved northwards a short distance to the dumps of the Glogfawr Mine which closed in 1920. The mine heaps were not very productive although a few specimens of small yellow wulfenite crystals on pyromorphite and cerussite were collected.

1" 127 SN 74 81

GOGERDDAN MINES, Cwmrheidol, Card

See also BOG MINE; DAREN MINE

WWS (1848) BOG + DAREN MINES

1" 127 Melindwr ✓ SN 69_2 81_8

JR+S 690 817

GOGINAN MINE, "~~Aberystwyth~~ Goginan pit", Card. (I)

See GOGINAN NORTH LODE; GOGINAN S. LODE; LEVEL RIECH; LEVEL NEWYDD; GOGINAN W; BRYNPICA; BWLCH etc.

TMH (1868), 74. (PbAg). Blende; galena.

WWS (1848) N, e S LODES (qv). Working [big mine] under the direction of Mr John Taylor. Plan of dressing floors, showing mouth of 26 fm level, at end of book

GeL (1858) Chalybite - simple rhombs in quartz; galena.

OTJ (1922) (52) Pb/Zn p76: A Mine Royal, very old - a section of ca 1699 shows much older workings eg a "Roman" adit. Lode is

brecciated mudstones, cemented by xlised quartz with stringy ribs, & bunches of lead ore. Some copper ore. Section, p 78.
BRYNPICH is an old mine in E part of Goginan. Still further E lies BWLCH (CWMERFIN) MINE

RSGSB (8/65) V 3 No secy min's. Shale with quartz, galena, etc.

DC Davies (1888) Noted for silver

JRF-S (1979) 43-4, Plate X1 (Photo of Taylors Sh. portal).
Main mine on Goginan V & branches, & NE strike.

GOGINAN MINE, Melindwr, Card. (II)

BRYNPICA workings contiguous, other mines in group worked more or less separately (BWLCH [= BWLCH CONSOLS]; BWLCH-RHENNAID [= LEVEL NEWYDD]). Worked 17th Cent by Soc. of Mines Royal. who drove adit (50 fms); deep adit, at 260 ft OD is later. Orebodies in lower Frongoch to upper Gwestyn. ~~FRONGOCH~~ INCLINE, FRANCIS's, TAYLOR's, GILBERTSON's Sh's. BRYNPICA ADIT. BRYNPICA Sh. DEEP ADIT at 60 fm. to E to below Boundary Sh. of BWLCH M, but not connected.

Argent. galena; zinc ore

MJ (1840 ff)

WJL (1967) Numerous refs.

DEB (1976), 3, 35.

1"127 SN 69 81

GOGINAN NORTH LODE, Melindwr Card.

See also GOGINAN MINE

WWS (1848) (40) "Wkg"

1" 127 SN 69 81

GOGINAN SOUTH LODE, Melindwr Card.

See also GOGINAN MINE, BWLCH CWM ERFIN, CAE NANT

WWS (1848) (M) "Wog"

1" 127 SN 673 813/669 807

GOGINAN WEST MINE, Melindwr Card.

See also GOGINAN MINE, etc.
=GWRDDA

OTJ (1922) (53) Pb 139-40. Trial 1¼ mi W of Goginan mine. Adit x-cut (230'OD) N from base of slope W of Cyncoed farm, meets lode 105 fm from mouth. Shaft & levels. Lead ore.

JRF-S (1974) 42-3. Veins, to W of Goginan (contin?) striking a little N of E, in Frongoch, of quartz with sphalerite, some galena, pyrite. Mid-19th Cent. Shafts, crosscut adit level at 200 ft OD. =GWRDDA

MJ (1850-4, 1856).

1" 127 SN 71 78

GOTHIC MINE Upper Llanbadarn y Creuddyn, Card.

See also RHEIDOL LTD. MINES; ABER FFRWD

OTJ (1922) Pb.

JRF-S (1979) 57 = ABERFFRWD, q.v.

1" 127 SN 776 651

GRAIGEN-DDU, Caron-uwch-clawdd, Card.

OS 1" map 127 Hill here named "CRAIGEN DDU".

JRF-S (1979) 84 Trial to N in Cwmystwyth formation; nothing known, appar. unsucc.

1" 127 SN 705 741

Lower Llanfihangel y Creuddyn

GRAIG GOCH, ~~Cwmnewydion~~ Card.

= RED ROCK MINE

cf GRAIG GOCH, (Cwm Ystwyth) Ysbyty Ystwyth (NOT =)

WWS (1848) of the LISBURNE MINES (qv). "Wkg"

Lode (21), with FRON GOCH & CWM MWYDION

OTJ (1922) 110-1 (86) Pb/Zn. Blende. p.110. On S slope of Cwmnewydion [valley]. Originally 2 adits & opencast (old). Upper part promising but in depth bunchy & in hard ground.

Argentif. galena Worked from 1840 & at end of the Cent.

[NB "Gwaith Goch" mine, Llanafan, ca 1 ml to the S is on a hillside named "Graig Goch" on OS 2½" map.]

JRF-S(1979), 68, 75. At W end of Frongoch Vein. Early outcrop workings, then reopened up 1840 with 2 adits to SW at 670 ft OD and ~450 ft to the east, at 580 ft. OD. Good ore found, & Engine Sh sunk to 60 fms; Eastern Sh, to 12 fms. Disappointing in depth however & good ore only nr. Eng. Sh. Active to 1855, then 1869-75, 1879-82, 1886-89. Lead & zinc ores recorded. MJ (13 Sept 1851).

DEB (1974, 1976), 1, 17.

GRAIG GOCH, (Cwm Ystwyth), Ysbyty Ystwyth Card.

See CWM YSTWYTH SOUTH 80 74

cf GRAIG GOCH, Lower Hanfihangel y Creuddyn (NOT=)

WWS(1848) "graig goch (CWM YSTWYTH) NOT Wkg" (30)

1" 127 SN 796 829

GREAT WEST VAN MINE, Cwmrheidol, Card

~~See~~ ESGAIR LLY E (=) 79 8Z

OTJ(1922) Pb. p94. By main road. Two lodes outcrop within the loop of the road. Several adits. Lode-stuff = breccia of quartzyn rocks cemented by quartz & calcite, with galena & a fair proportion of blende. A good deal of ore on dumps.

WJL(1967) Map, p170 The E mine

1" 127 Roundsn 715 725

GROGWYNION MINE, Llanafan, Card. (I)

=BRYNYSTWYTH See also GROGWYNION NORTH (=PANTARHYRION)

WWS (1848) Two lodes. "A very ancient mine, on which workings are recommenced"
LLWYN MALYS LODE (qv) is part of Grogwynion Lodes (25), (26)

RSWB, TBG, GR, GS, III 63-4 (31/3/63) Dumps by river and at 712723 impromising Open adit at 711₅ 723₅. Vein exposure at 713-4 724₅. Quartz; blende, galena, pyrite.

OTJ (1922) (54) Pb. p. 112-3 Four lodes. Section Plate XVI

given. Lodes have quartz & brecciated mudstone, lead one with some silver
GROGWYNION DEEP ADIT driven N [from SN 715722] with the intention of striking the Fron-goch workings.

JRF-S (1979) 75-76. At least 4 veins ~ NNE, in Frongoch. Earliest workings shafts on outcrops ~ 1000 ft OD, later levels to N from valley, down to ~ 570 ft OD. Lower parts worked from X-cut to N from river bank at 310 ft OD & a shaft to 36 fm below that level. Ore best above low adit. Veins narrow, breccia cem. by quartz with galena, sphalerite; oreshoots pockety

GROGWYNION M., Llanafan, Card. (II)

& localised – trials both to E & to W
Worked before 1845, 1850-60, 1864-5, 1870-89.
Lead ore produced MJ (1850-1).

WJL (1967) 45 etc.

DEB (1974, 1976) I, 17

GROGWYNION N. MINE, Llanafan Card

See PANT ARL HYRION 7072

GWAITH CWM GROT, Up. Llanf.-y-Cr., Card.

See BLAENCWM M. 8275

(D)

GWAITHDAI, Cwmrheidol Card

See CASTELL MINE 77 80

GWAITHDDU, Upper Llanfihangel-y-Cr., Card.

See ALLT DDU 71 78

GWAITHDDU, Trefeirig, Card.

See DAR(R)EN E. 69 83

GWAITHFACH, Llanfair Clydogau, Card.

See GWAITHVACH 6351

1" 127 SN 711 784

GWAITH GOCH MINE? LODE Rheidol Valley Upp. Llanbadarn-y-Cr., Card.

See also NANT EOS MINES, RHEIDOL UTD. MINES & ERWTOMAU of GWAITH GOCH MINE, Ystwyth Valley.

WWS (1848) Part of NANT EOS MINES (q.v.) "wkg" (55)

OTJ (1922) [redacted] p.101. Part of RHEIDOL UNITED MINES. Adjoins NANTGLAS on NE. Worked from 2 x cuts.

NB ~~to~~ on hillside named "Craig Goch" on OS 2½"

JRF-S (1979) 59. GWAITHGOCH = ERW-TOMAU. Part of RHEIDOL UNITED M's. 2 veins: substantial workings on ~~[redacted]~~ GWAITH GOCH V.,

limited workings on RHIWRUGOS V. Levels driven SW from S side of Rheidol gorge, lowest (~200 ft OD) just above river bank at 714 783. Active intermitt. 1853–1889. Reopened 1915–16 as part of ERW-TOMAU M[qv] Much richer in sphalerite than in galena.

WJL (1967) 172, 193.

DEB (1975) 2, 34.

1" 127 SN 708 723 Llanafan 710 724

GWAITH GOCH MINE, (Ystwyth Valley), Card

NOT GWAITH GOCH (Rheidol Valley) Cwmrheidol.

OTJ (1922) (56) Pb. 140-1 W of GROGWYNION, on N side of Ystwyth valley. At least 2 lodes. 4 adits, 3 in Grogwynion mine property. Lead ore, blende.

[NB Is on hillside named "Graig Goch" on OS 2½" map, but is NOT = Graig Goch mine, Ysbyty Ystwyth or Graig Goch mine, Lower Llanfihangel y Creuddyn.]

JRFS(1979) 75. GWAITH GOCH (Ystwyth). 710724

W of GROGWYNION M, on same ENE veins in Frongoch. 4 levels: main = LEVEL-Y-NANT at 570 ft OD driven W from 712722 (within grogwynion M. area). Extensive workings, but little produced (lead ore). Said to be rich in sphalerite at depth. Working 1857–61, 1916.

WJL(1967) 173, 193.

DEB (1974, 1976), 1, 18.

1" 140 SN 638 511 (?)

GWAITHVACH TRIAL, Llanfair Clydogau, Cardigs.

GWH (1971) 69 A Francis (1874) says 3/4 ml E of Llanfair mine, begun ca 1850, with shaft to 30 fms – galena with 80 oz Ag ton^{-1}.

Prob = shaft, now covered over, on S bank of clywedog-ganol ca 200 yds below Pont glan-rhyd.

May = CROWN MINE of WWS (1845) [qv]

JRFS (1979) 90 GWAITHFACH, 640 511.
Trial shaft near here on vein with

traces argent. lead ore (80 oz/ton).

1" 127 SN 691 839

GWAITH-YR-AFON MINE, Trefeirig, Cardig (I)

See also "TALIESIN M.", of LLANCYNFELYN M.,

O.T. Jones (1922) 73 = RIVER-WORK M., less than ½ ml to NE (of CERIGYRWYN M.?) and prob. on same lode.

WWS (1848) TAL-I-ESSIN (98) working a N-S lode, said to have been v. productive.
(76) CWM SYMLOG W and N, not working now.

DE Bick (1976) 3 19. GWAITH YR AFON, an old

trial at 689 839, reopened at times under following heads:

1862-3 WEST CYMSYMLOG
1864-5 CWMSYMLOG or CWMSYMLOG UNITED
1868-70 CWM DARREN
1878 RIVER MINE

J. R. Foster-Smith (1979) 35. GWAITHYRAFON = TALIESIN = WEST CYMSYMLOG, SN 690 839. Lead ore. On series of NE veins in Frongoch formation, a contin. of DARREN & CWM DAREN lodes. BLUE Sh. to 18 fm lev., OLD WHIM Sh. to 30 fm. level. FEARON's Sh., BACON's sh. Re-worked at times 1853-67.

OTJ (1922) calls Llancynfelin mine at Tre-Taliesin "Taliesin mine". Clear from Min. Journ reports, 1853-1863 that he is wrong.

GWAITH-YR-AFON

~~TALIESIN~~ MINE, Trefeirig, Card. (II)

John Williams Cat. (Winter, 1994) From GWAITHYRAFON M., tyrolite good rich green coatings [~½ cm fans], minor chalcopyrite, quartz. Some of the tyrolite is altering to chrysocolla.

Rust SA & Mason, J.S. (1994) "An unusual occurrence of arsenate minerals at Gwaith-yr-Afon mine, Dyfed, Wales". J. Russell Soc. 5 [2] 109-113. GWAITH-YR-AFON M

[N.B. = TALIESIN M] is at SN 691 839. On wooded hillside on N side of Nant Silo stream. Samples from large Engine Sh dump, and from X-cut adit ~ 30 m W of the dump, flooded to ~ 1 m for 1st 20 m; then 10 m to lode, with drift E ~ 40 m to flooded winze. Vein < 0.5 m here - quartz - chalcopyrite. Sigrif 2½ min'l only in 1st 10 m of this drivage. Primary gangue - quartz minor calcite & ferroan dolomite ["ankerite"], galena, chalcopyrite, minor red sphalerite, tetrahedrite, & bournonite (XRD). Galena

GWAITH-YR-AFON
~~TALIESIN~~ MINE, Trefeirig, Card. (III)

has inclusions of tet'hed e bournonite e <20μ grains of ullmannite e gersdorffite (EDAX). Many secondaries: Agardite-(Y) (XRD, EDAX) <0.5 mm acic green. Bayldonite thin minutely xline crusts (XRD) {Dumps only} Brochantite (XRD); chalcophyllite <0.5 mm em-green hex plates in qtz ass. w. tyrolite. Chr'colla (IR) incl ψ- e epi-morphs. Connellite (XRD) <0.5 mm spherules/sprays; copper e cuprite (rarely); ?-erythrite coatings; ?Jarosite, yell-brown → golden yell as thin drusy crusts of platy xls. ?Langite e/or wroewolfe; Linarite, poorly-formed blades, <1 mm:

Malachite (XRD) thin botry. crusts.
Mimetite (XRD; IR, P:As ~ 1:4) c'less → yell pale green prismatic to blocky xls. —1.5 mm w. mal, cer & occas tyr etc. Olivenite (2 spcs; XRD) "leucochalcite", silky white radiating to 0.75 mm on goeth-qtz.—ass w. an iridescent greenish botry. mineral. → XRD = a partly characterized min from Chile
Parnauite (XRD), pale blue-green thin drusy crusts lining <3 mm cavs in qtz & thin crusts on corrod. ch'pyrite; rarely tiny laths → 0.75 mm groups, ass w tyrol, connell, ch'colla etc. Pharmacosiderite tiny (<0.25 mm) c'less → pale green → yellowish

GWAITH-YR-AFON

~~TALIESIN~~ MINE, Trefeirig, Card. (IV)

cukes as thin drusy crusts on goethite e qtz. (XRD), with ?-scorodite. Rosasite (XRD) green needles (< 0·5 mm) ?-Scorod greyish → v. pale yell v. sparely scatt'd xl aggs (< 0·75 mm) e xls (< 0·3 mm) ident. by appearance.

?-Serp / devill Pale blue pearly laths → 0·5 mm on 2 spec's, w. brodhaultite.

Tyrolite (sulphatian) abundant. Groups of laths to 4 mm but usually 1–2 mm. (XRD, IR) w chlcolla e mal.

Unident No 2. groups of light green platy six-sided xls (< 0·15 mm) give XRD near schulenbergite.

1974 OR

Raybould's (1976, Trans Inst Min Met)

widespread arsenopyrite inclusions in galena from Cent wales re-examined e is NOT as'py, but tetrahedrite, bournonite or ullmannite (confirmed by EMPA eXRD)

Recently, sec'y arsenates also found on same lode (but weaker mineralis'n) at Darren mine.

1" 127 SN

GWARCWM LODES, Card.

WWS (1848). Three lodes, "working". (99) (100) (101)

NB Gwar Cwm Uchaf at SN674 917

1" 127 SN

GWAR CWM BACH, Card.

WWS (1848). NST Wkg. (119)

NB Gwar Cwm Uchaf at SN 674917

GWRDDA MINE, Melindwr, Card.

See GOGINAN WEST M.

1" 127 SN 73088O

HAFAN MINE, Cerlanymaesmawr, Card. (I)

See also HEN FWLCH MINE, BWLCH GLAS MINE.

OTJ (1922) (57) Included with HEN FWLCH. Pb/Cu/Zn

141: on Hafan lode 3/4 mi W of Brynyrafr.

24: Calcite, galena, blende, chalcopyrite.

P. Thomson, Priv. Comm. (1968): Pyromorphite, linarite, etc.

JRF-S (1979) 45-6. Sometimes worked with HENFWLCH. On HAFAN V. in gwestyn & Van rocks. Levels to E from gully

in W face of Cerrig-y-Hafan e at Henfwlch at 1214 ft OD driven W e connected w. HAFAN Sh. at 24-fm level.
Deepest level at 927 ft OD thought not to have been driven far.
DAVIS's, ENGINE, BOG. Sh's.

Quartz with galena, chalcopyrite, pyrite; isolated masses calcite.
Lead, zinc e Cu ores returned, mid 19th Cent.

WJL (1967) 188.

DEB (1976), 3, 46.

HAFAN MINE, Ceulanymaesmawr, Card (II)

RSN(1992) 23

Hafan and Henfwlch Mines, Mid-Wales
27th September 1992

Eight members explored the Hafan Mine workings running parallel to the Hafan Quarry Incline. Several old ore stock-piles yielded massive galena associated with the ankerite vein material. A somewhat corroded orange-brown platey crystal of wulfenite was also found. At the foot of the Hafan Incline are the remains of a water wheel pit in front of which was a small overgrown spoil heap. Several fine specimens of prismatic cerussite crystals were collected associated with small amounts of malachite and linarite.

We also investigated the dumps running parallel with the stream and here we found some transparent lime green pyromorphite crystals.

HAFOD M., Ysbyty Ystwyth, Card.

See DOLOGAU M. 77 73

1" 127 SN 783 741

EAST HAFOD MINE, Upper Ll. y. Creuddyn, Card.

See ~~also~~ CWMYSTWYTH W. MINE. 78 74

OS 2½" map shows "Old Level" at 783 741s,

SJS Hughes (1981) "The Cwmystwyth Mines", map on p4 shows "East Hafod mine" here. p66: Adit a Crosscut 2<300 fm long to lode. Aband. 1873

NOT IN JRF-S (1979).

~~Adit beam~~

1" 127 SN 727 700

HENDRE QUARRY, Ysbyty Ystwyth, Card.

See also HENDREFOLEN M.

16 June: Hendre Quarry, Pontrhydygroes [Grid Ref: SN 727700] Another fine day found fourteen members, including some from the Geologists' Association, in attendance. We were in unknown territory here, a quarry that we had not visited previously. Some nice quartz groups were found, 20-30mm though not clear. Small amounts of pinkish coloured dolomite were also collected.

RSN (1996) 29

1" 127 SN 715 695

HENDREFEL{E}N MINE, Ysbyty Ystwyth, Card. (I)

= ELLA MINE | See also HENDRE Q; ~~Pontrhydygroes~~

HENDREFELEN = ELLA M

OTJ (1922) (58) Pb. p141-2 Probaby on a continuation of PEN-Y-GIST Lode. Trials on lode, W of Hendrefelen farm. An adit ca 880' OD from base of hill N of Hendrefelen, to lode. Not known whether it reaches the shaft, over 700' distant.

JRF-S (1979) 80: HENDREFELIN = ELLA SN 718 698 Vein wavy ~ NE in Lower Frongoch. Adit at 880 ft OD to S towards vein - not known

whether reached vein. Shallower level on vein, driven SW; e at least 4 shafts. Working ~ 1870.

DEB (1974, 1976) 1, 38.

Jill Goltz Priv Comm 7/90 (From N. Hubbard?)
Ullmannite, cerussite, pyromorphite, linarite, malachite

Bevins (1994). Mimetite

71 69

HENDREFELEN MINE, Ysbyty Ystwyth, Card. (II)

Russ. Soc. Newsl. (1991) 21

Sunday: We met at Hendrefelen Mine, situated two miles south-west of Ysbyty Ystwyth and last worked in 1873. Here, some excellent cerussites and quartz crystals were collected and small amounts of ullmanite were also found. Linarite associated with cerussite appeared to be plentiful. Galena with alteration crusts of covelline were collected as were small crystals of chalcopyrite.

Included in the quarry boundaries now are the dumps of the old **Hendre Felen Mine** and these were visited. Micros of linarite, malachite and cerussite were found, but the elusive ullmanite remained elusive. Although it had only limited mineralogical interest, this was a very interesting quarry from a geological point of view, with very impressive folding making the strata particularly interesting to observe. Our thanks go to the quarry manager and to Bill Bagley, a local member, for arranging the weekend visits.

RSN (1994) 29

M. Cooper et al. [redacted] (2009), MM, 73, 235-250

Steverustite, 6 samples.

1" 127 SN 73, 88₀
JRF-S737883

HÊN FWLCH, Ceulanymaesmawr, Card. (I)

See also HAFAN MINE; BOG; CAMDWR

WWS (1848) "Wkg". Very powerful lode (86?)
p. 660: Calcite in large ribs enclosing spots of copper, lead, e zinc ores. p 662: siderite
p 663. Calcite enclosing chalcopyrite, galena e blende.

OTJ (1922) (57) Included with HAFAN. Pb/Cu/Zn.
141: ? on Hafan lode or a branch. Adit at 1214' OD drains main or Hafan shaft to 24 fms. To W, BOG shaft also drained by this adit

DC Davies (1888) Pb, Cu, Zn ores; large ribs of calcite

JRFS(1979)45-6. Sometimes worked w. HAFAN M. On HAFAN V., in Gwesteyn & Van rocks. Levels to E from gully in W face of Cerrig-y-Hafan & HENFWLCH LEVEL at 1214 ft OD driven W to connected w HAFAN Sh. at 24 fm level. DAVIS'S, ENGINE, BOG, HENFWLCH (= STRIKE'S) shafts.

Quartz w. galena, chalcopyrite, pyrite; isolated masses calcite. Lead, zinc, & copper ores returned, mid-19th Cent.

WJL (1967), 188.

DEB (1976), 3, 46.

HÊN FWLCH, Coulanymaesmawr, Card. (II)

RSN (1992) 23

After lunch we went on to examine the spoil heaps of the Henfwlch Mine. Here, several specimens of hemimorphite and acicular aurichalcite were collected. Quartz crystals were common within the vein breccia.

RSN (1998) 33 18.
gal, sphal, qtz, aurichalcite. "Two small clear hexagonal x/s, 2-3mm, untdent, poss angles, cerussite or apat" [? leadh- susannite]

BMSN (2001) 60, 7, 8.
T. Cotterell. Serpierite sprays on finely xline hemimorphite in vug in qtz-cupy-sphal-ferroan-dolomite veinstone.

PTO

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite (ident. vis.). One xl, plate 0.5mm across, 8-sided tabular orange, on cerussite with intergrown cerussite epyromorphite in a cavity, from dumps at 737 883.

1" 127 SN 805 835

HIRGOED DDU, Cwmrheidol, Card.

See also ESGAIR LLE

OS 2½" map shows "Old Levels" (2), around SN 805 835 on Hirgoed Ddu hillside, on a vein of the Esgair Lle - Wye Valley mine (Montgom) group. An "old shaft" on the same vein, to the NE, is shown, beside the road, at SN 807 837 (in Montgom)

HIRNANT, Cwmrheidol, Card.

See NANT GAREDYN LODE 75 82

IMPERIAL MINE, Upper Llanbadarn y Creuddyn, Card.

See PANTMAWR M. 70 78

WEST IMPERIAL M., Upper Llanbad.-y-Cr., Card.

See GELFRON M. 7078

KANINOG, Ceulanymaesmawr, Card.

See CYNEINIOG. 7288

1" 127 SN 80 74

Upper Wanfihangel y Creuddyn

KINGSIDE WORKINGS, (Cwmystwyth) Card.

See ~~also~~ CWM YSTWYTH ~~LODES, etc. COPPER HILL,~~ MINES etc

OTJ (1922), 115: Central part of CWMYSTWYTH MINES. Based mainly on Kingside Sh. e adit, e on Level fawr = Bonsalls level (820' OD). Also other shafts e levels. Lodes: KINGSIDE, BELSHAZZAR or COPPER LODE, PUMPSINK, PENGEULAN GROUP, "GILLS" [= MITCHELLS]

BELSHAZZAR: galena, blende. No pyrite. ? = COMET

KINGSIDE: Corresponds with MAIN LODE → See PUGH'S WKS.

S J S Hughes (1981) "The Cwmystwyth mines"

KYLON POTOSI M., Ceulanymaesmawr, Card.

See ESGAIR HÎR. 7291, 7391

LEFEL GOPOR, Trefeirig, Card.

See CWMDAREN M.

1" 127 SN 674 882

LERI or LERI VALLEY MINE, Ceulanymaesmawr, Card

= PENPONTBREN UCHAF. See also PENPONTBREN MINE

OTJ (1922) (59) Pb/Zn/Cu 142: Trial on S side of R. Leri ½ mle E of Talybont. Two adit X-cuts 560'OD e 300'OD. to lode — spots e stringers of galena with some blende, e spots of chalcopyrite assoc. with dolomite.

JRF-S (1979) 30 Two crosscut trial levels to S from Afon Leri to ESE vein in Frongoch beds; poorly mineralised with calcite e dolomite with galena,

sphalerite, some chalcopyrite
Working at times 1858-1879.

LEVEL FAWR, Cwm Ystwyth, Card.

See CWM YSTWYTH M's 77, 97

LEVEL FAWR, Ysbytty Ystwyth, Card.

See LOG-Y-LÂS MINE 7372

1" 127 SN 775 727

LEVEL LAMPWLL, Ysbyty Ystwyth, Card.

O.S 2½" map has "Level Lampwll" at 775 727

JRF-S (1979) 78. Several trial levels to S around Nant Gau, prob. in search of LOG-Y-LAS V.
"LEVEL LAMPWLL; SN 775 727"

1" 127 SN 706 823

LEVEL NEWYDD, Tirymynach, Card.

See also BWLCHRHENNAID M; LEVEL RIECH; GOGINAN PENGRAIGDDU, BWLCH, CAE NANT; BWLCH

WWS (1848) ~~LEVEL RIECH~~ LEVEL RIECH (qv) AND LEVEL NEWYDD [as on same lode]. Being "worked by the Goginan (qv) Company. (Y4)

OTJ (1922) 81. E of BWLCHRHENNAID. Prior to 1843 worked by an adit xcut called LEVELYRHYCH (ca 910'OD), driven W to the Bwlchrhennaid shaft & ca 80 fms to E. NEW LEVEL or LEVEL NEWYDD driven 1842 further E & lower (ca 700'OD) One included in GOGINAN returns

DC Davies, 1888 Noted for "silver" [argentiferous galena]

JRF-S (1979) 51-2 = "BWLCHRENNAID". Main sh. on LEV: NEWYDD VEIN, NNE in Frongoch, a branch of GOGINAN V. system. Working in 1700, & later with BWLCH as B. CONSOLS or B. UNITED & working 1845-75, 1880-1883, producing lead ore. L. NEW proper is E part of BWLCHRHENNAID, & developed through LEV. NEW. SH. to 72 fms & LEV NEW. itself, a crosscut from S, at 700 ft OD "portal" at 857 820 "[sic!!!!][707820?]" started 1842, meeting vein 492 ft from portal. Short-lived workings, 1918.

DEB (1975) 2 44

LEVEL RHYCH ? Melindwr Card.

See LEVEL RIECH 69 82

1"127 SN 6, 8₂

LEVEL RIECH ?Melmdwr Card.

See also LEVEL NEWYDD; GOGINAN

WWS (1848) "Level Riech e LEVEL NEWYDD (qv)" "worked by the GOGINAN (qv) Company". Wkg. On same lode. (14)

OTJ (1922) 81. See LEVEL NEWYDD card for detailed information

LEVEL-Y-NANT, Llanafan, Card.

See GWAITHGOCH M., Llanafan. 7172

1" 127 Ysbyty Ystwyth. SN 77

LISBURNE MINES ~~Aberystwith~~ Card.

See also LISBURNE NEW M; LISBURNE S. MINE; GLOG M's; PEN Y GIST; LOG-Y-LAS; FRON GOCH, CRAIG GOCH, CWM MWYDION, CROSSWOOD PANT-Y-GWAITH

TMH (1868) 74. Kr. Sil. Slate. (Pb). Blende; calcite; galena; chalcopyrite; rock xl.

WWS (1848). Includes GLOG FAWR; GLOG FACH; PEN Y GIST; PEN Y GIST, S. LODE; LOGALLAS; FRON GOCH; GRAIG GOCH; & CWM MWYDION lodes. [Q.V.] "Are worked under management of Mr John Taylor."

GeL (1858) Blende. Calcite, with quartz, at Lisburne lead mines, near Crosswood [?] - fine xls with flattened or somewhat rounded summits, like some of the Alston specimens.

1" 127 SN 77

LISBURNE NEW MINE ?Ysbyty Ystwyth, Card.

See also LISBURNE MINES

OTJ (1922) (60) Pb p. 142. Situation not known.
Lead-ore 13 tons - 1875 - near Pontrhydygroes.

LISBURNE SOUTH M., Upper Gwnnws, Card.

See LLWYN LLWYD M. 7468

LLAINHIR MINE, Llancynfelyn, Card.

See DOLCLETTWR MINE 6591

1" 127 or 140 SN

LLANBADARN MINE Card.

OTJ (1922) (62) Pb. Worked 1848 only. 143. Situation unknown.

6081 Llanbadarn-fawr
6459 " Odwyn (pH)
5063 " Trefeglwys (pH)
55

1" 127 SN 65$_4$ 92$_1$

LLANCYNFELYN MINE, Llangynfelyn, Card.

See also TRE'R DDÔL, "TALIESIN", BRYN ARIAN M

WWS (1848) Six lodes. "This mine has lately been re-opened on a large scale, but with little success". Lodes (104-109)

OTJ (1922) (63) Pb. 143: Several old shafts either on the marsh or a low knoll ½ mi W of Treddol. Lead ore

GR et al (6/65) At SN 650921, a chimney by a completely overgrown opencast & bumps: some white vein-quartz. [This is either Llancynfelyn or Tre'r Ddôl]

JRFS (1979) 24. SN 651 920. Chimney & other ruins. Several small ^ veins, EW & ~NNE
Lead one output 1845.
OTJ calls this mine (at Tre-Taliesin) "TALIESIN", wrongly.
WJL (1967) 96, 109. [His "Taliesin" is Llancynfelin JRFS]

DEB (1976) 3, 42. = TALIESIN, at 651 921

LLANDEWI BREFI 1" / 40 SN 662 553 Card.

See also RHYSGOG M; CWM BREFI; CWM DULAS; CWM ROBERT

N-F. (1959) Small group of mines recorded by WWS (1848) & described by Francis, A "History of the Cardiganshire mines" (1874)

WJL (1967) Map, p. 237 Lead mine.

1" 127

~~SN 68 86~~
(JRFS 695 858)

LLANERCH, ~~Trefeiriog~~ Ceulanymaesmawr, Card

WWS (1848) "Small workings, lately commenced" (81)

OTJ (1922) (64) Worked 1 year, 1856 Pb. (4 tons)
143: Unimportant trial in Leri valley just above Elerch.

JRF-S (1979) 2 trial levels in Frongoch beds on S slopes of Banc Bwlch Russer. No major vein known, but 4 tons Pb ore returned.

MJ (1851)

DEB (1976), 3, 32

LLANFAIR MINE, "Lampeter," Card.

TMH (1868), 74. (Pb Ag) Galena.

[Presumably = Llanfair Clydogau, [qv]]

1" 140 SN 629 512

LLANFAIR CLYDOGAU, Llanfair Clydogau, Card. (I)

See also CROWN MINES; FACHDDU; NANT FACH DDU

WJ Hughes N-F (1959) Small groups of mines recorded by WWS (1848) & described by Francis (1874). Old mines, famous for high Ag-content of their lead ore. Worked to 540' below adit, abandoned ca 1864.

WWS (1848) Lode (1) LLANFAIR CLYDOGAU LODE, most argentiferous in the county. 80 oz Ag ton^{-1} Pb. Working.

D C Davies (1888) Argentiferous galena lode.

OTJ (1922) At the beginning of the 19th Cent., the ore had as much as 50 oz Ag per ton

WJL (1967) Map p 237 171-2, 174, 177. Lead mine, discov 1760.

GWH (1971) 66-69. Descrip, history, section.
ENGINE SHAFT, at SN 627 512. Galena highly argentiferous – 86 & 71 oz Ag ton^{-1} metal galena, so silver was more valuable than lead ∴ a "silver mine".
Worked intermitt. ca 1760 → 1862.
Country rock, described as a "lamprophyre porphyry" has been shown to be 2 fine grained sediments – a greywacke & an argillite the latter showing replacement by galena (Univ. of Bristol).

LLANFAIR CLYDOGAU, Llanfair Clydogau, Cardigs (II)

Site now overgrown dump on N bank of Clywedog betw. village & main road much removed for road making. Shaft & adit also seen just E of the village. Other adits a few yards, & 500 ft further E.

JRF-S (1979) 87-88. Veins ~ EW. Active early 19th Cent → 1862. Reputation as "silver-rich". Worked to below 90-fm level.
MJ reports 1850-62.

1" 139 SN 31 54
3 3(3) 5 5(6)?

LLANGRANOG, Llangranog Cardigans

GWH (1971) 64. 9½ mE E 35° N of Cardigan.
J. Geraint Jenkins, Ceredigion (The Journ. of the Cardigs Antiquarian Soc) 3, 240 says several attempts to discover lead ore in Llangranog. One lot shipped for Swansea in 1850's but boat lost. Lead was from Trwyn Croy, near Glangraig. Unsucc. attempts in 1860's to find lead on beach e above church. Near 31 54
No sign now visible. Built over.

JRF-S (1979) 90. Trials for lead ore ~1850. Some ore, but not developed. Approx 333 555

1" 127 SN 612 746

LLANILAR, Llanilar, Card.

JRFS (1979) 59. Crosscut level to S on Allt-y-Mynach in top Frongoch. Unsucc. trial.

LLAWRCWMBACH MINE, Ceulanymaesmawr, Card.

See LLANWR Y CWM. 70 85

1" 127 SN 707 854

LLANWR Y CWM, Ceulanymaesmawr, Card.

= LLANWRCWMBACH

WWS (1848). Not wkg. On same lode as LLECHWYDD HÊN, ~~LLANWR Y CW~~ LLECHWYDD HELIG, BWLCH Y STYTLEN, CAMDWR & DROSGOL, (9v), which bears galena & blende (80)

OTJ (1922) LLAWRCWM BACH (65) Pb. 27, 143: On N side of Leri valley just below Craigypistyll waterfall. Most ore from a shaft ca 30 fms deep. Lead ore

J.G. Raybould, PhD Thesis, Aber., (1973). 61. Quartz;

pyrite, including good cubes to 1 cm; chalcopyrite; galena; arsenopyrite 20-30 μ grains in galena & in chalcopyrite; ankerite; limonite.

JRF-S (1979) 33-4 LLAWRCWMBACH. Small mine on ENE Camdwr V. in lowest Frongoch. Shaft just N of Afon Leri, & shallow trials on hillside E of Llawr-cwm-bach.

Lead ore produced, mid 19th Cent.

DEB (1976), 3, 32

Cotterell (2009) J. Russ. Soc. 12, 15-25. Mention. Author unable to locate

1" 127 SN 68L 84S

LLECHWYDD HELIG, Trefeirig Card (I)

= WILLOW BANK MINE See also LLECHWYDD HÊN

WWS (1848): NSr wkg. On same lode as LLECHWYDD HÊN; LLANWR Y CWM; BWLCH Y STYTLEN; CAMDWR and DROSGOL (q.v.), which bears galena & blende (80) LLECHWYDD HELIG.

OTJ (1922) (67) LLECHWEDDHELYG Pb worked 1853 (3 tons) 144. Small trial on Camdwr lode, in valley W of Llethyhen deep adit. p27 galena & chalcopyrite

JG Raybould, Thesis Aber (1973) PhD. Malachite common

to 5 cm – "a few small x/s of pyromorphite, less than 1 cm across [sic!!] were also observed" [p. 65]. Quartz is only gangue. Chalcopyrite, galena, sphalerite

JRF-S (1979) 34. On ENE Camdwr V.
LLECHWEDDHELYG = WILLOW BANK.
Levels to W from side of Afon Stiny & shafts on outcrop. Old workings, re-worked mid 19th Cent. At 30fm level V said to be 20 ft wide of "loose, burnt-up quartz & gozzan" In old engish at 17 fms V 10-12 ft wide of quartz, baryte w. galena, cerussite, chalcopyr. If correct only record of baryte in this area.
MJ (1853-1862)

LLECHWEDD HELYG, Trefeirig, Card. (II)

S. Rust (Priv comm 1991) has found superb elyite ass. with galena.

(Rothwell & Mason (1992) UKJMM II 30-40. Wulfenite not uncommon - see Jones (1987). Bright yellow tab. xls to 5mm & small orange bipyr.; on vuggy quartz, assoc. with black goethite and pyromorphite, on dump from old shaft at 6820 8490; also mallachite, cerussite.

BMS Sympos Spec (MM) (1997) "Schmiederite" tiny Cantab-blue ~~xtal~~ compact rad. hairy spots on matrix, Looks OK (but could be cyanotrichite ?)

LLECHWEDD HELYG, Trefeirig, Card. (III)

RSN (1992) 23

Llechweddhelyg Mine, Mid-Wales
23rd August 1992

Ten members made the one mile walk to the eastern workings of the mine and examined the dumps by the old shaft. Pyromorphite was still fairly common in the quartz gossan, occurring as both lemon-yellow barrel-shaped and lime green acicular crystals. Wulfenite was still to be found; in fact four individual specimens of the orange brown platey crystals were collected. Cerussite crystals up to 8mm were also common, dark green fibrous malachite was still relatively easy to find and linarite was found sparingly and rarely as good crystals. The meeting was interrupted in mid-afternoon by heavy rain making it a very soggy uphill walk back to our cars. The weather also stopped our proposed visit to the site of the nearby Vaughan Mine - but perhaps some other time!

P1.0

S.A. Rust (1994) UKJMM 14 (1), 9.

Cheride at LLECHWEDD HELYG MINE (SN 682 848), sub-ill plates, often slightly rounded in groups to about 1·5 mm, found in only 2 cavities, in a thin corroded galena kernel w. patches yellowish goethite prob. replacing chalcopyrite. Confirmed by XRD (NHMus.)

M. Cooper et al (2009) MM, 73, 235-250

Steverustite. 38 samples.

1" 127 SN 663835

LLECHWYDD HÊN, Trefeirig, Card.

=ALMA MINE
=E. BRONFLOYD

See also BRON FLOYD; LLECHWEDD HELIG

WWS (1848): On same lode as LLECHWYDD HELIG; LLANWR Y CWM; BWLCH Y STYTLEN; CAMDWR and DROSGOL [qv]. Not wkg. galena; blende.

(80) LLECHWYDD HÊN

OTJ (1922) = Alma mine (66) Pb. 144: Adjoins BRONFLOYD on the E. Lead ore.

WJL (1967) Map, p 170 Labels "LLECHWEDD-HEN" the mine just W of "Lleiy-hen" (ie 682846 - Llechwedd Helig), and labels "ALMA" the mine just E of

Bron-floyd (ie 669 836 "Llechweddhen")

JRF-S (1979) 40 LLECHWEDDHEN = ALMA = EAST BRONFLOYD.
W end of NE Camdwr V worked at BRONFLOYD
e to NE at LLECHWEDDHEN, in Frongoch.
Drained by BRYN-LLWYD (BRONFLOYD) ADIT Lev,
at 275 ft OD. Worked from shaft.
Lead ore produced; only 1852-3.
Further trials to NE at about 669 839
MJ (1852-3)

1" 127 SN 707 906

LLECHWEDD-LLWYD, Ceulanymaesmawr, Card.

JRF-S(1979) 18. Trial shafts on Blaenceulan N vein to W of that mine. Calcite, chalcopy., sphalerite.

OTJ (1922) 21-2

LLETTY-EVAN-HEN, Tirymynach, Card.

See LLETTYHEN M. 6884 etc

1" 127 SN 687 848 – 692 850
6984 6884 6885 6985

LLETTYHEN MINE, Tirymynach, Card. (I)

= VAUGHAN MINE | = LLETTY EVAN-HEN MINE

OTJ (1922) (68) Pb/Zn p144: Deep adit into narrow valley 1 mi S of Elerch – workings > ½ mi to E. Discov. ca 1845. Shafts. Shallow adit from S (850' OD). Deep adit driven E on lode ca 1860 at ca 530' OD – 52 fm level, to under lode & shaft carried down to it – but disappointing. Pockets of Mn ore in pink-stained shales near footwall of lode. Lead-ore, blende p.27: galena, ~~[illegible]~~ Mn-ore.

P.T. 168 Pyromorphite.
W (PENYCASTELL) section:- Pyromorphite; langite, etc.

P.T. 169 Leadhillite, hexagonal crystals.

WWS (1848) p662 Pen-y-Castell "Montgom", on same lode as DROSGOL, but further W. Psilomelane

P.T. specs, examined by RSWB. Quartz vein stuff, with chalcopyrite, sphalerite, galena. Some cupy alt → ? covelline. Malachite; brochantite; linarite; langite; ? cerussite; ? anhemim. trace native copper dendrites alt'g → micro-x/s cuprite (octahedra).

LLETTYHEN MINE, Tirymynach, Card. (II)

JG Raybould, Thesis (1973) After PhD

Blocked adit at 6920 8457 @ 850'OD. Much chalcopyrite in ankerite + quartz; considerable quantity of secondary malachite

Deep adit at 6850 8480 @ 580'OD. galena, chalcopyrite, almost completely altered to malachite - large radiating masses of fibrous x/s; also some covellite.

p62: Arsenopyrite grains, mostly <50μ, within galena; usually near centre of galena grains; in one polished section, up to 0.6 mm across,

with galena & chalcopyrite in cavity in quartz. Some galena altering to covelline along cracks and margins bounding on chalcopyrite. Quartz, chalcopyrite, sphalerite, galena, arsenopyrite, pyrite.

JRF-S (1979) 34-35. SN 694849; = LLETTY-EVANHEN = VAUGHAN. On ENE Camdwr V., in upper Frongoch beds; up to 30 ft wide, of quartz with fine-grained galena ("steel ore"). Discov'd 1845 — shafts on outcrop; shallow adit at 850 ft OD; deep adit from W at 685 848 = 52 fm level. Closed 1881 Reftwoned Pb & Zn ores.

MJ. (1850-1854)

LLETTYHEN MINE, Tirymynach, Card. (III)

DEB(1976), 3, 32

Cotterell (2009) J. Russ. Soc. 12, 15-25.
Details, history etc. Author obs. Mn minerals at 4 points between LLETTYHEN deep adit and LLANWRCWMBACH M's. Thin coatings to botry. crusts, richest at 6944 8493 by main shaft. Coronadite dominant, traces lithiophorite, cesarolite & goethite. To E a spec. of cryptomelane goethite & pyromorph on qtz. At 6985 8498 thin crust lithiophorite, also pyromorph & cerussite.

LLETTY MARALLT ADIT, Melindwr, Card

See PENGRAIG-DDU MINE 71 SZ

1" 127 SN 675 924

LLETTY'R-FRAN, Llangynfelyn, Card.

JRF-S(1979) 24. Trial levels on NNE fault in Gwestyn rocks.

=LLYWERNOG. 1" 127 SN 730 810

LLEWYRNOG, Cwmrheidol Card

See also WEST LLEWYRNOG, LLEWYRNOG CROSS LODE, POOLES POWELL, PONTERWYD, CWM RHEIDOL etc BOG CLARA

WWS (1848) "Lately abandoned" [1845-6] (63) "LLEWYRNOG"

OTJ (1922) LLYWERNOG, including POWELL and PONTERWYD. (70) Pb/Zn. p 88-9 Cons wb
two mines, POWELL's & POOLE's.
Blende, lead-ore.

WJL (1967) Map, p 170, Labels the NE section "LLEWERNOG", the SW "Powell" p 193.

JRFS (1979) 54-5 LLYWERNOG MINES =

PONTERWYD M's. A group of mines, including POOLE'S, POWELL'S, BOG, CLARA & PONTERWYD M's. 19th Cent. Lead & zinc ores in Lower Frongoch. Several Keins.

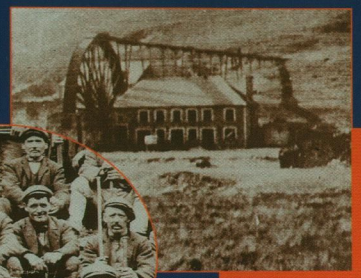
Min Journ. (1852) onward

DE Bick (1975) 2 13, 16, 18.

R.S.N (1996) 29 23 "Cwmbrwyno M." (but ST 733 809) good sphalerite xls, small quartz xls; small unident platy white xls.

Llywernog Mine

Museum & Caverns





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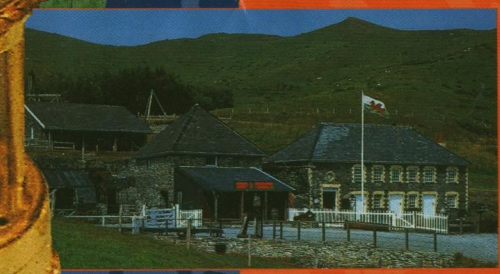

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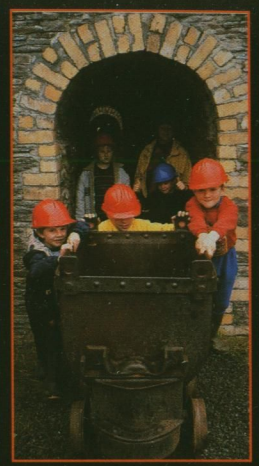

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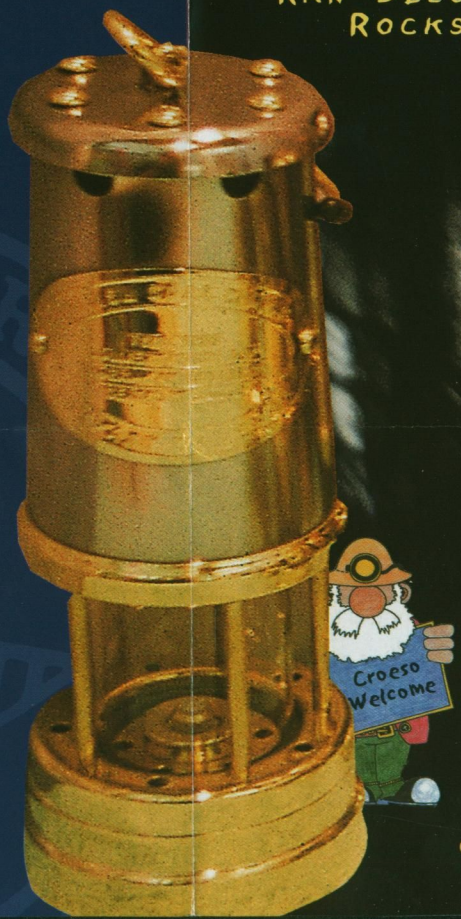

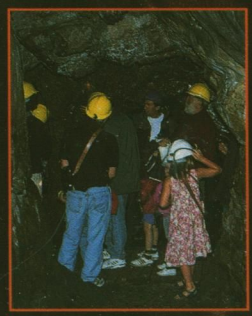

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1" 127 SN 73 81

LLEWYRNOG CROSS LODE, Cwmrheidol Card.

See also LLEWYRNOG, WEST LLEWYRNOG.

WWS (1848). Ndr wkg (66)

1" 127 SN 72 81

WEST LLEWYRNOG, Cwmrheidol Card.

See also LLEWYRNOG, LLEWYRNOG CROSS LODE, POWELL

[?=POWELL]

WWS (1848) Not wkg. (64)

1" 127 SN 750 913

LLUEST-GRAFIA Ceulanymaesmawr, Card.

See also ESGAIR VRAITH

JRF-S (1979) 21 Trial level to W from at base of Frongoch to E end of Esgair Hîr vein.

OTJ (1922) 20 Esgair hir V traced here.

LLWYNADDA, Geneu'rglyn, Card.

See WEST ALLTYCRIB 6489

1" 127 SN 673 928
675 931

LLWYN-CRWN, Llangynfelyn, Card.

cf. LLWYN GWYN.

JRF-S(1979) 25: Trial level to S from 673 928 in Frongoch rocks; shafts at 675 931.

1" 127 SN 742 683

LLWYN GWYDDYL Upper Gwnnws, Card.

See ~~LISBURNE (S) MINE~~

WWS (1948) (12) NOT wkg. Extensive old wkgs. On same lode as ESGAIR MWN MINES

OS 1" map has house named Llwyngwyddel at 740 686 so this mine probably = "Lisburne S mine." ie LLWYN LLWYDM

Bick ~ 742 683

GS 1:100 000 map (1973) "Cent. Wales Mining Field" has "LLWYN GWYDDELL" marked here.

DEB (1974, 1976) 1 34, 36 Beyond LLWYN LLWYD almost to B 4343 road. Extensive grassy

hummocks; said to have been very rich.

1" 127 SN ? 68$_3$ 94$_1$

LLWYN GWYN Ysgubor-y-Coed Card.

See also BRYNDYFI MINE (?=) of LLWYN-CRWN [6792]

WWS (1848). 1 mile S of Eglwysfach. "A little galena has lately been found at this place. Wkg." (120)

OS 1" map shows house "Llwyn-gwyn" just N of BRYNDYFI mine of OTJ (1922).

1" 127 SN 247 686
345 685

LLWYNLLWYD MINE, Upper Gwnnws Card. (I)

See also ESGAIR-MWN MINES.
Probably = LLWYN GWYDDYL = LISBURNE S. MINE [qv]

OTJ (1922) 127 LLWYNLLWYD or SOUTH LISBURNE MINE, on Esgair-mwn lode, to WSW of that mine. An old mine, tried by a shallow adit, and shafts.
p142 Recently, an adit (ca 980'OD) driven S to lode. Much blende on shafts & adit dumps.
Map: mine (61). Zn/Pb.

Mining Ann Review, (1970). LLYWLLWD M., near

Aberystwyth, Pb/Zn/Ag, being rehabilitated by "Andex Mines".

JRFS (1974) 84 LLWYNLLWYD = SOUTH LISBURNE

SN 745 685. On SW end of Esgairmwyn Vein, in Frongoch. Adit to S from Cwm Gwyddil to cut vein. Shafts on vein. Vein up to 12 ft wide, richer in sphalerite than galena. Reserves remain? Active c1850-1878, also earlier (an engine installed in 1785).

MJ 24 Aug 1850

1" 127 SN 747 686

~~LISBURNE SOUTH MINE, Upper Gwnnws, Card.~~
~~See also LISBURNE MINES. Probably = LLWYN GWYDDYL~~

~~See~~ LLWYNLLWYD MINE ~~[illegible]~~ (II)

OTJ (1922) (61) Zn/Pb. LISBURNE SOUTH 142: ^ ?= Llwynllwyd mine, on Esgairmwyn lode, 3/4 ml SW of Esgairmwyn mine. Shaft, e ~~and~~ adit 980'OD to S to lode which appears promising. Much blende on dumps.

WWS (1848) (12) Not working - "LLWYN GWYDDYL", on same lode as Esgairmwyn mines. Extensive old workings

OS 1" map has "Llwyngwyddel" (house) at 740 686

WJL (1967) 324

DEB (1974, 1976) 1, 34-36 FAIRCHANCE M
= LLWYN LLWYD = S LISBURNE. 746685
Photo p35. galena, sphalerite. History.

Geol Survey 1:100 000 Cent Wales Mining Field map (1973) marks it as "LLWYN GWYDDELL"

LLWYNMALUS MINE, Upper Hedrod Card.

See LLWYN MALYS 6867

OTJ (1922) (69) Pb/Zn

1"127 SN 68a 67a

LLWYN MALYS, Upper Lledrod, Card.

See also LLWYN MALYS NORTH LODE

WWS (1848) (22) "This mine is again raising ore"
p 658: Remarkable for having Ag though far from other argentiferous mines.

OTJ (1922) (69) LLWYNMALUS MINE Pb/Zn
145: ¼ mile W of Llwynmalus farm. Shaft, & shallow adit (810'OD) driven W on lode from 100 fm E of shaft. Lead ore; blende

OS 1" map has house "Llwynmalis" close by.

FJN (1962) 71 A steam engine installed at

Llwyn malaes mine S of Bron Caradoc, but too costly [Francis, A. (1874) "The Hist of the Card. Mines..."]

JRFS (1979) 82. LLWYNMALUS, 690679.
On ENE vein in Frongoch, poss SW cont. of Glogfach vein? Worked prior to 1840 but water problems when sunk below shallow adit. By 1850 below 10 fm level - 3 shafts, OLD ENGINE, LONDON & WESTERN Sh's. London Sh. to 24 fm; levels at 8, 14, 24 fm. Worked intermitt to 1867. London Sh eventually to 56 fm below adit. Lead ore; zinc ore.
DEB (1974, 1976) 1, 37.

SN 68? 68?.

LLWYN MALYS, NORTH LODE, Upper Lledrod, Card.

See also LLWYN MALYS

WWS (1848). Lode (23)

1" 127 SN 741 789

LLWYNTEIFY MINE Cwmrheidol Card.

See also NANT EOS MINES; CWM RHEIDOL etc

OTJ (1922) 96. Adjoins NANT EOS M's (to the E of N.E. mines).

OS 2½" map shows house "Llwyn-Teifi" at SN 742783

JRF-S (1979) 61. Small mine on SE branch from Castell Vein, just E of BWLCHGWYN M.

DEB (1975) 2, 25.

1" 127 SN 679 929

LLWYNWALLTER, Llangynfelyn, Card.

JRF-S (1979) 23. Trial on NNE fault in gwestyn rocks.

LLWYNWNWCH MINE, Upper Llanfihangel y Creuddyn Card.

See FRON GOCH MINE 72-74

1" 127 SN 710 974, 731 974

LLYFNANT VALLEY, Ysgubor-y-Coed, Card.

See also under Isygarreg PH, Montgom.

OS 2½" map shows "Old Levels" in Llyfnant Valley – one near foot, at SN 710974 near Caerhedyn, and others at SN 731974, near Maesycilyn. Others N of stream, in Montgom. [9v]
GS map shows a parallel vein system running along the valley.

1" 127 SN 793 873

LLYN-LLYGAD, Trefeirig, Card.

JRF-S(1979), 48 Trial level to W from crags SE of lake, in Van. No vein known nearby; v. remote; ~1900 ft OD; no road access.

LLYWERNOG, Cwmrheidol, Card

See LLEWYRNOG 7381

LLYWLLWD M., nr. Aberystwyth, Card.

See LLWYNLLWYD M.

1"127 SN 667,939s

LODGE PARK COPPER TRIAL. ?Llancynfelyn. Card.

See also DOLCLETTWR M., LLANCYNFELYN, PWLL ROMAN, NEW BOG M., TAL-Y-BONT. BRYNARIAN, PENSHARN LOVEDEN; PARK LODGE PARK GATE

John Williams Catal. (Winter, 1994). From LODGE PARK Cu TRIAL, Trer-ddol, nice small cubes cuprite, scattered on slaty mudstone.

Bevins (1994) Connellite.

OS 1" 127. Lodge Park, 6693. cf PARK LODGE; PARK GATE (? =). Trial-part of LOVEDEN M.

BMSNewsl (9/95) 42, 3 Nice micro langite x's on shale

D. Green (1997) BMS Newsl. 46 5. Cuprite, nat copper, occas. connellite, langite, brochantite

JS Mason & D. Green (1996) UKJMM, 19-23 "Supergene Cu mineral in situ @ L. Park Cu trial, Dyfed" Brochantite, connellite, nat. Cu., cuprite, langite. [MA 97M/1652]

RSN('03) 42 27 Visit. Usual + chalcopyrite

LOGAULAS M., Ysbyty Ystwyth, Card.

See LOG-Y-LÂS M. 7421

1" 127 or LOGAULÂS Yspyty Ystwyth. SN 742 716

LOG-Y-LÂS MINE, ~~Aberystwyth~~, Card. (I)

See also ~~[illegible]~~ LISBURNE MINES; PANT-Y-GWAITH

TMH (1868), 74 Lr.Sil. (Pb) Cerussite

3M: Superb tabular cerussite.

OUM: Pyromorphite; cerussite from "Logaulas Mine, Pontrhyd y Groes, nr Yspytty Ystwyth, Card."

WWS(1848). Of LISBURNE MINES (qv). "Working". The principal lode of Logaulas is again seen on the W at Bwlch y baedd [704 701] Lodes (18) (19) (20) p660. In S Lode - Calcite in large semi-transparent obtuse rhombohedra. p671: Towards close of "last" century adit driven from N. Eventually

reached lode after ca. 360 fathoms ~~[illegible]~~ "nearly half a mile". Poor lode, abandoned. Then Cornish chaps drove on a few feet & cut true lode – very rich! Then gave up on losing main lode by following small vein on S – poor. "Present" holders surveyed accurately, drove a x-cut to N & found rich lode & a v. rich bunch of ore.

GeL (1858) Magnificent translucent tabular xls of cerussite at Logylas, one of the Liskeard mines.

RSWB, TG 5/8/62 Vol II pp 90-95, & with GR & GS, Vol III pp 59-60. Galena; blende; quartz; superb cerussite mostly obtained by blasting vein outcrop; yellow powdery _____ with galena.

AWGK. Brown pyromorphite, vg.

LOG-Y-LÂS [LOGALLÂS] MINE, Ysbytty Ystwyth, Card (II)

OTJ (1922) (71) Pb mine. p. 118: Meyrick in 1810 says is an old work of lead ore & quartz. An adit - LEVEL FAWR ca 556' OD begun 1785, not completed in 1810. Then barren lode cut — abandoned Cornish adventurers then took over [v. supra]. Older workings lay a considerable distance to W of where adit cut lode; older adit ca 30 fms above the deep adit - older adit, or 60 fm level, was E-W. Ultimately six shafts, from W → E (with depths in fathoms):

TAYLORS (105), FLAT-ROD (60), VAUGHANS (120), EDDY's (130), WORSLEY's (90), EASTERN (44). Levels at 10, 26, 36, 44, 60, 70, 90, 105, 120, 130 fms. As lode v. wide some levels on two branches, in places 15 fms apart.

Orebody - great horizontal length of 600 fms, but v. shallow - to 120 fms, mostly only to 90 fms depth. Disturbed by a large X-course, probably that met in GLOGFACH & GLOGFAWR.

Galena, blende replaces galena at SW end of lode

Map, p 120. [See Plans file]

p33: Quartz, calcite; gozzan, "carrying cerussite fairly plentifully"

LOG-Y-LÂS MINE, Ysbytty-Ystwyth, Card. (III)

JRF-S (1979) 76-77 = LOGAULAS = LISBURNE

Portal of LEVEL FAWR at 739 722
Worked by J. Taylor & Sons 1834-91.
Vein curves, ~ EW, in lower Frongoch, S of the Ystwyth fault. Outcrop workings 18th Cent. LEVEL FAWR 556 ft OD driven from 739 722 started 1785, aband. when barren vein cut in 1810. A Cornish company went on further & soon cut a rich vein but failed to follow it & mine aband. again. Then J. Taylor took over - success Also worked from shafts: TAYLOR'S Sh.

to 105 fm lev., FLAT ROD Sh. to 60 fm lev.,
VAUGHAN's Sh., to 120 fm lev; EDDY'S Sh to 130 fm
WORSLEY's Sh., to 90 fm & EASTERN Sh to 44 fm.
Levebar 10, 20, 36, 44, 60, 70, 90, 105, 120, 130 fms.
Vein wide & some levels in 2 branches
up to 90 ft apart! One body 3600 ft
along vein; bottomed 90 → 120 fm – a gentle
trough. Sphalerite exceeds galena at
W end., zinc not produced. MJ (1850 →→).

DEB (1974, 1976), 1, 22.

LOG-Y-LÂS MINE ~~1" 127 SN 739722~~

~~LEVEL FAWR~~, Ysbyty Ystwyth, Cardigans (IV)

~~See also LOG-Y-LAS M, GLÔG MINES~~

FJN (1962) 71. G. Borrow ["Wild Wales" (1862) 505] passed what his guide called "Level Fawr" on his way to Ysbyty Ystwyth — with smoking chimneys & clanging engines.

OTJ (1922) LEVEL FAWR Started 1785 from Ystwyth valley. Adit to Log-y-lâs lode. Reached glôg mines ca 100 yrs later.

RSWB TBG (8/62) Portal of LEVEL FAWR at SN 739722. Only

overgrown ruins remain.
According to the landlord of the "Miners Arms", Ysbyty Ystwyth (1/69), a prospector recently went up the adit, which was very wet - but could not reach the lode because of a blockage.

(UNITED) 1" 127 SN 668940

LOVEDEN, MINE, Ysgubor-y-Coed Card.

= PENRHYNGERWIN MINE

See also LODGE PARK Cu trial.

OTJ (1922) (72) Pb/Zn p48* Section. (Plate IX)

galena, abundant calcite

JRF-S (1979) 21-23. Section p 22. = LOVEDEN UNITED = PENRHYNGERWIN.

Vein NENE, 5-6 ft wide, of calcite, w. bunches & stringy galena, spots sphalerite. Engine Sh sunk from 1852 57 ft to deep adit then further to 30 fm below. Last

closed 1939.

MJ (1852-55) various reports

WJL (1967), 193-4, 340.

DEB (1976) 3, 42.

Ixer & Stanley (1996) MM 60 978. Siegenite "COVEDEN MINE", Cent. Wales. Anal. from Mason (1995) MPhil thesis, Univ Wales, Aber. $(Co_{1.02}Ni_{1.52}Fe_{0.49})S_4$

1" 127 SN 7 3 728

Llanafan.

MAEN ARTHUR, Upper Llanfihangel y Creuddyn, Card.

WWS (1848). "Not wkg". (27)

OS 2½" map shows "Maen-Arthur" farm or hamlet at SN 729 729. The N branch of the Grogwynion lodes passes just S of Maen-Arthur (GS 1" map). An "old level" is shown where this lode cuts the stream at SN 737 728 [in Up. Llanf.-y-Cr.]

JRFS (1979) 76. Trial level at 733 728 in Llanafan pH. in Frongoch formation.

1" 127

SN 731 974

MAESCYLIN, Ysgubor-y-coed, Card.

JRF-S (1979) Unsucc. trial for lead ore on Llyfnant fault; levels to S from Llyfnant valley.

Upper Llanfihangel y Creuddyn

MAIN LODE, Cwmystwyth, A Card.

See CWMYSTWYTH and PUGH'S WORKINGS

1" 127 SN 68, 81-7 | 676 816

MELINDWR MINE, Melindwr Card

= MELINDWR VALLEY; CWMERFIN W., or TY'NY PWLL MINE

OTJ (1922) (73) Pb. 143-6 145. X cuts, shafts, etc, to test ground, near Goginan. Several adits.

JRFS (1979) 43. 676818. Two X-cut adits to N toward contin. to SW of Cwmerfin vein. Upper level aband after 1800 ft (before vein expected). Lower cut 2 veins, at 90 ft & 480 ft from portal. Ore pockety. Trial shaft at junct. of Ty'n-y-pwll & Melindwr streams. Lead ore returned, 1874-8

1[9]127 SN

MELYN Y BONT GOCH, Card.

WWS (1848). Not Wkg. (82)

1" 127 SN

MELYN Y LODGE Card.

WWS (1848) Not wkg. Hard lode with only copper-pyrites (114)

MIDDLETON MINE, Ceulanym.. ete, Card.

See ALLT Y CRIB 6489, 6589

Upper Llanfihangel y Creuddyn

MITCHELL'S LODE, Cwmystwyth, A Card

See CWMYSTWYTH, and PUGH'S WORKINGS

MOELGLOMEN, Ceulanymaesmawr, Card.

See MOEL Y GOLOMEN 69 87

1" 127 SN 698 873

MOEL Y GOLOMEN, Ceulanymaesmawr Card.

WWS (1848). Ndr wkg. Many small strings of galena (86?)

OTJ (1922) (74) MOELGLOMEN Pb. Worked only 1865 - 1 ton! p146. Unimport. trial ¼ mile W of Bwlchglas farm. On a small fracture 1½ c N of the Hafan Lode.

PT (1968) Priv Comm. Nothing of interest found.

JRF-S (1979) 31 MOELGOLOMEN. Trials,

active in 1850, for one in fractures assoc. w. the HAFAN V, NENE, in lowest Frongoch beds. Shaft to 60 ft then gave galena. Tried again 1858 and 1865. 1 ton Pb ore!

MJ (24/8/1850, 21/8/1858)

MYNACH VALE MINE, Upper Llanfihangel y Creuddyn, Card

See TY-GWYN " "

1" 140 SN 64 51 (?)

MYNYDD BACH MINE, Llanfair Clydogau, Card.

See also PONT GLAN-RHYD TRIAL.

WD (1815) Discov. ca 1800. Lead & copper ores.

GWH (1971) 69 Probably = PONT GLAN-RHYD Trial.

1"127 SN 668861

MYNYDD GORDU, Ceulanymaesmawr Card (I)

WWS (1848). Three lodes, only slightly displayed in trenches. NDR wkg. (84) (85) (86)

OTJ (1922) (76) Pb/Zn mine, ca 1 mile W of Elerch or Bontgoch. p59: Section. Small galena, blende.

JRFS (1979) 32 Worked HAFAN V in Frongoch beds where strike changes ENE → NE. Worked following discov. of ore at surface as late as ~1870 [BUT see WWS (1848)]

Adit level ~680 ft OD at vein ~30 ft from surface. BURNETT's SH. to 46 fm below adit. Rich in galena, sphalerite. Trials to E & W unsucc., but untried vein remains to E towards Cefngioyn M.

DEB (1976), 3, 31.

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite, first reported by Roe (1988); rare on main dumps 6674 8604; brown to orange tab. to 1 mm on thin pyromorphite coatings on mudstone; locally assoc. w. cerussite.

MYNYDD GORD(D)U M., Ceulanymaesmawr, Card. (II)

JIWilson 5/94 good wulfenite, excellent anglesite x/s; good hemimorphite; quartz, galena, sphalerite

1" 127 SN 738 788
737 786 (JRF-S)

NANT EOS MINES, Cwmrheidol, Card.

See also ABERYSTWYTH, PEN RHIW, LLWYNTEIFY MINE
CWM RHEIDOL etc

WWS (1848) Working under direction of Mr John Taylor. Includes GWAITH GOCH; ESTYMTEON; and PEN RHIW LODES (q.v.)

OTJ (1922) Pb/Zn. Included in Aberystwyth mines
p 96 NANT EOS = NANT EOS CONSOLS = BWLCHGWYN.
Drained to 40 fms from surface by an adit (upper adit) E from YSTUMTUEN or CWMRHEIDOL MINE. Shaft is 200 yds E on PEN RHIW. Further E lode worked in adjoining LLWYNTEIFY MINE

WJL (1967) Map, p 170 labels "Nanteos" the mine nearest, c to SW, of "Temple", ie 738 788

J.G. Raybould, PhD Thesis, Aber., (1973) BWLCHGWYN mine - shaft 250 m ENE of Penrhiw Sh. [ie ~~c~~ near 739 789]. Much marcasite; quartz; sphalerite; ankerite; galena; chalcopyrite, much altered to malachite [?]

Marcasite not common on E shaft tips. Much sphalerite; good galena octahedra to 1.5 cm on sphalerite.

JRFS (1979) 62 = PEN RHIW M. [q.v.]

NANTEOS CONSOLS, Cwmrheidol, Card.

See BWLCH GWYN, PENRHIW M[l]s.

1" 140 SN 625 505
6 4

NANT FACH DDU, Llanfair Clydogau, Card

See also LLANFAIR CLYDOGAU MINE

WWS (1848) ② Not wkg. An adit level driven

GWH (1971) 65-6. Not in WD (1815) but ~~known~~ referred to in 1848 (WWS).

In T.O. Morgan "Guide to Aberystwyth" (1851) quoted in list of Cardigs mines in appendix as worked. Included in reworking lease for LLANFAIR CLYDOGAU mine in 1860-2. Crossent a shaft 15 fm deep referred to in Mining Journal in 1862 just before abandoned.

200 yds S of centre farmhouse, close to brook, adit 70 paces E 20° S in near-vert quartz vein, then X-cut 28 paces N 20° E - no lode.

200 yds E of this adit is a shaft on a N-dipping lode, small stopes. Galena has same Ag content as that from Llanfair Clydogau [i.e. high]

WJL (1967) Map, p237. Lead mine "FACH DDU"

JRF-S (1979) 88 FACH-DDU, 626 504, Trials 1860-1862, a level & a shaft to 15 fm from surface. Vein 4 ft wide. Unsucc. MJ 1860 & 62 under "Llanfair"

1" 127 SN 755 829

NANT GAREDYN LODE, Cwmrheidol, Card.

See also CARN-LLWYD

WWS (1848). Near Pont Erwyd [SN 750 809] Not wkg. Exhibits blende in the bed of a brook (69) "NANT GAREDYN LODE"

OS 2½" map shows "Trial level" in brook of Nant y Cae-rhedyn, ca 1 mi N of Pont-erwyd, at SN 755 829, on an ENE vein (GS 1" map). To the ENE another level on this lode, from next stream - "Hirnant", at SN 762 833 [CARN-LLWYD, q.v.]

JRFS (1979) 50 NANTYCAE.-RHEDYN

[OS 2½": NANT-Y-CAE-RHEDYN]. Trial level to S & E in Van beds.

NANT GLAS LODE {Upp Hanbadarn-y-Creuddyn, Upper Hanfihangel-y-Creuddyn, Card.

See DANIELL'S AND NANT GLAS LODE.

See NANTGLAS MINE

1" 127 SN 710 784

NANTGLAS MINE, Upp. Llanbadarn-y-Cr., Card.

See also RHEIDOL UTD. M's etc.

OTJ (1922) 100 Discussed under RHEIDOL UNITED MINES. Worked from two x-cut adits S to lode, then stoped to surface. A deeper x-cut S from a lower level of GWAITHGOCH MINE. "Lead-ore", "spar" [?=calcite] "blende".

WWS (1848) (54) Not working. ("Daniells e Nantglas lode")

JRF-S (1979) 58 Part of RHEIDOL UTD. M's. Vein a little N of E in Frongoch. Where it

crosses narrow-gauge railway, worked to W to link with PANTMAWR M. Adit ~400 ft OD. Worked intermitt 1853-1889. MJ reports (1853-65)

WJL (1967), 288.

OLD NANTGLAS M., Up. Llanfih.-y-Cr., Card.

See ALLT DDU

1" 127 SN 777813

NANT MEIRCH, Cwmrheidol Card.

See also CWM RHEIDOL etc. See CASTELL MINE

WWS (1848) Not wkg. [Either Pen Rhiw or Nant Ebs?] continued.

[More likely (57) = Castell mine, q.v. OS 2½" map:-
Nant-Meirch at 778 813]
galena, dissem, w. a very little chalcopyrite
[JG Raybould PhD Thesis Aber. (1973)]

1"/27 SN 793 840
792 839

NANT-NÔD MINE, Cwmrheidol, Card.
= EISTEDDFA-FACH

OS 6" map shows "Nant-Nôd lead mine" at SN 793 840 with shaft & level.

JRF-S (1979), 50. NANT-NOD = EISTEDDFA-FACH at SN 792 839. Adit to S from Nant-nod at ~ 1500 ft OD to ~ EW vein in Gwestyn. Shafts on vein. Working 1849, 1853-6, 1858. Lead ore produced

MJ (4/9/1858)

R.E. Bevins & T. Sharpe (1982) "Welsh Minerals"

Pyromorphite, good. Illustrations No 15, 16.
NMW 76.1G.M2, "EISTEDDFA GURIG".

1" 127 SN 775 777

NANT RHUDDNANT, Up. Llanfih.-y-Creddyn, Card.

See also DOLWEN, TY-GWYN.

JRF-S(1979) 64. Small mine betw. MYNACH VALE [See TY-GWYN] & DOLWEN M's, on same NE vein in upper Frongoch. A number of shafts & levels. Lowest level from N bank of stream & shaft sunk near portal.

OTJ(1922) 136 under "DOLWEN M". Old shafts & adit at 870 ft OD. Much blende & chalcopyrite with calcite. Lead ore.

1" 127 SN 781 779

E. NANT RHUDNANT, Up. Llanfih.-y-Cr., Card.

See also NANT RHUDDNANT; DOLWEN M.

JRF-S (1979) 64. EAST NANT RHUDNANT, 781 779
Trial shaft in Trongoch formation. No details or history.

1" 140 SN 792522

NANT RHYD-TALOG, Llandewi Brefi, Card.

OS 2½" map shows "Lead Mine (Remains of)" at SN 792522, on Nant Rhyd-talog. (GR "Camddwr Valley")

1" 127 SN 773 790
NORTH: 777 793

NANT SYDDION, Cwmrheidol, Card

See also NANYCREIAU etc.

WW's (1848): "Nor wkg" (47)

OS 2½" map shows "Level" at SN 773 790, by Nant-syddion house. Seems to be on SSW extension of NANTYCRIEAU lode Levels also shown at SN 760, 786, below Esgair-cwynion, and near SN 777 793, also further to the NE, around 781 797 — ? Nantycrieau West mine.

JRF-S (1979) 63 NANT-SYDDION, 773 790, and

NORTH NANT-SYDDION, 777 793, both levels driven W in Frongoch beds, prob. in search of vein of Nantycreiau mine.

NANT Y CAE-RHEDYN, Cwmrheidol, Card.

See NANT GAREDYN LODE 75 82.

1" 127 SN 734 892

NANTYCAGAL MINE, Ceulanymaesmawr, Card (I)

= EAGLEBROOK MINE

See also CAMDWRBACH MINE; ESGAIR VRAITH

OTJ (1922) SRMRGB, 20. (40) Pb/Cu. Worked 10 yrs.

13 7 8 W of road from Talybont to Brynyrafr mine. Lode traverses an anticline in Van mudstones & underlying grits, which are thrown down by it ca 20 yds, to the N. Lode dips steeply N, of shattered grits with dolomite, chalcopyrite and much gozzan; it is more decomposed & carries a greater variety of secondary minerals than most lodes of the district.

Worked by several old shafts to a 10 fm level within grit outcrop, from which most ore. More recently another shaft sunk near the road, into the Van mudstones but little ore got. Lode cannot be traced either E or W into base of Frongoch deposit, which is only ca 350 yds from mine; the downthrow is therefore greatest where lode crosses axis of anticline.

Ore returned for 10 yrs. head ore 598 tons, copper ore 71 tons. Max. year 1856 – 152 tons Pb ore.

RSMOB, TBG, PT etc. 8/65 → V.6-7, 113

Galena; chalcopyrite; quartz; dolomite; much cerussite; vg rls linarite; brochantite.

NANTYCAGAL MINE, Ceulanymaesmawr, Card. (II)

langite, some assoc. with leadhillite, hex. tablets; malachite; anglesite; hemimorphite; cuprite, octahedra & massive; native copper; devilline (BM X-ray) in and on dolomite and quartz; blende; ?-serpierite (some Zn present. IR⇒ SO_4^{2-}) "limonite" gozzan; The basic copper sulphate found first at Ladywell mine, Shrops, in fine xls & crusts (IR; BM X-ray). & wroewolfeite. "Woodwardite" detected by X-ray on a wroewolfeite spec. sent by Ike Wilson to Dr. Bill Birch, Museum of Victoria, Melbourne, Victoria 3000, Australia (Priv Comm to JIW 18/10/78)

JRF-S (1979) 46. SN 736 892. Vein a little N of W, ~6 ft wide, of breccia cement'd w. quartz, some calcite & dolomite, with galena, sphalerite, chalcopyrite. Cerussite, pyromorphite & malachite occur widely in shallower parts. Vein only found where it crosses a small anticline

Original workings prob. v. old; restarted 1853. Deep adit driven W ~120 ft on vein to meet shaft. Another shaft, ENGINE Sh, ~240 ft further W, & WESTERN ENG. Sh. ~480 ft further W.

MJ (1853–June 1865) Operations very fully reported

WJL (1967), 93.

DEB (1976), 3, 48.

NANTYCAGAL M., Ceulanymaesmawr, Card (III)

S. Clark 5/82 Priv Comm. Aurichalcite
Tested RSWB – efferv w. HCl; Hg-thiocy test = Zn+Cu)
Dumps well picked over, little to find now

RSWB. Min Record (1982) 13 [3] 167–170, 174.
"Wroewolfeite in Britain". Illustr. descrip; mineralogy.
Galena, chalcopy, sphal. in quartz & dolomite cementing mudstone vein-breccia. Cerussite; anglesite; leadhillite; hemimorphite; nat. copper; cuprite; malachite; brochantite; linarite (illustr.) langite; devilline; serpierite; "woodwardite"; wroewolfeite (illustr.) amorph pale blue-grn basic copper sulphate as lake-gener. crusts.

E. Otty "The Central Wales Orefield" Min. Realm (1982) 1 [6]

26-30. Found: arkerite, cerussite, chalcopyrite, chrysocolla, cuprite, dolomite, galena, hemimorphite, linarite, malachite, pyromorphite, sphalerite, quartz. Also recorded are bindheimite, brochantite, covelline, devilline, marcasite, millerite, & nat. copper. Refs: DEB; Jones & Moreton; Rees D Morgan "The Metallif Mines of Wales" (NMusW).

J.A. Jones & N.J.M. Moreton "The Mines & Minerals of Mid-Wales" (1977). Nat copper, marcas, cupy, covell, chalcocite, millerite (found June 1976, needles intergr. w. quartz); cuprite, dol, ceruss, mal, smithsonite (bright yellow lustr bothy crusts); lin, broch, dev, pyrom, bindheim, hemim, ch'colla

NANTYCAGAL M., Ceulanymaesmawr, Card. (IV)

S&D. Rust. "Rock Bottom" (1987) 2, 28-33.
Lautenthalite has been ident. recently "in veinstone from the Eaglebrook Mine, Talybont, Wales"
[Confirmed orally to RSWB by R. Symes BM(NH), 6/87]

P. Wallace (Coll 1986) Dundasite (XRD, BM(NH)) from dumps

J. Rust, pers. comm. in Livingstone et al (1990) J. Russ. Soc. 3 (1) 23-4. Schulenbergite

(Rothwell & Mason (1992) UKJMM 11 30-40. Wulfenite (ident. microprobe); one 1mm brown tab xl. w. a little green pyromorphite (uncommon here) in a cav. in qtz [M. Rothwell]. The loc known for extensive suite of rare Pb-Cu sulphates etc. (Jones, 1983) At 7350 8930.

S. Rust, S. Burchmore & Ed Foy, (1995) BMS Newsletter 40, 8-10. New finds include caledonite, looking like serpierite but ⋀, to 0.75 mm; Laurionite (confirmed XRD (BM)), cleavages a few mm², blades → 1 mm. Mattheddleite tiny needles to 0.15 mm on laurionite. Phosgenite, blocky xls to 0.75 mm some with covelline. Ramsbeckite → 0.5 mm. Two unks (XRD) & several unident. List on Card (V).

NANTYCAGAL M., Cellilanymaesmawr, Card. (V)

provisionally ident from

Grant et al (1995) BMS Newsletter 40, 840 List: "NANT-Y-CAGLE"

Anglesite, arsenchalcite, brandtheimite, brochantite, caledonite, cerussite, chalcocite, chalcopyrite, chrysocolla, copper, covellane, cuprite, devilline, dolomite, dundasite, galena, gold, hemimorphite, hydrocerussite, hydrozincite, lanarkite, langite, laurionite, lautenthalite, leadhillite-susannite, goethite, linarite, malachite, maxwellite, millerite, matthieddleite, phosgenite, pyrite, pyromorphite, ramsbeckite, schmiederite, schulenbergite, serpierite, siegenite, smithsonite,

↗ $Ni_9Sb_2S_8$ tet.

sphalerite, trucekite, woodwardite, wroewolfeite, wulfenite.

In the afternoon we made our way to NantyMoch and Eaglebrook, where, after a bit of digging, lots of linarite was found with and without cerussite, from about half way down the tip. A few small but pleasing malachites were collected along with pyrite and chalcopyrite. A newly erected fence along the roadside inhibited digging at the top, but after looking round the site, a lens of pyrite in the slate and hemimorphite in massive sphalerite were also found. Meanwhile, a 'casual visitor' (otherwise known as *Newsletter* Editor John Jones) picked up a langite specimen!

NSN (1995) 27

BMSNewsl (1994) 39 20

Lanarkite, matthedleite, caledonite, phosgenite, lautenthalite, "and a possible scotlandite" susannite

Rust, Bell & Green (2003) UKJMM 24, 37-8. Bechererite

T. Cotterell (2006) UKJMM 27, 36-38. Cesàrolite (1st. Brit.), inconspic black botry crust w gibbsite on a spec. Also: bechererite, redgillite [not mentioned before]

1" 127

SN 79 SW 802

NANT-Y-CREIAU MINE, ~~Aberystwyth~~ "Gwrheidol", Card.

See also NANT Y CREIAU SOUTH, & WEST. NANT SYDDION

TMH (1868), 74. (Pb & Zn). Marcasite.

WWS (1848) p 661 "Working" Also produces blende (49) Hemimorphite – "Calamine, the siliceous species". p. 662 "The prismatic species (of iron pyrite) occurs in xls which have a tendency to dispose themselves in stellated groups" p662 Section of a lode, with blende galena & quartz

[i.e. marcasite]

OTJ (1922) (77) NANYCREIAU Zn/Pb. p103-5 An old mine. Blende, quartz, galena.

JRF-S(1979) 56. ENE vein in upper Frongoch. Sphalerite & galena. Ancient; reworking ~1750, 1845 intermitt to ~1895.
Four levels to NE into vein, lowest at 1230 ft OD. Shafts. Little done below deep adit & good reserves said to lie at depth.

WJL(1967), 100, 102

DEB(1975), 2, 29

RSN(1996) 29 "NANTYCRIA" dumps: pyromorphite in a small trial

1" 127 SN 7 8

NANT Y CREIAU SOUTH Lode Cwmrheidol Card.

See also NANT Y CREIAU, & NANTYCREIAU W.

WWS (1848) (48) Not wkg

1" 127 SN 782 797

NANTYCREIAU WEST MINE, Cwmrheidol/Card.

See also NANTYCREIAU, NANTYCREIAU S; NANT SYDDION

OTJ (1922) 104. Lode On slope ½ ml W of Nantycreiau two x cuts. good blende on dumps. Line of strike passes to S of Nantycreiau [cf NANTYCREIAU S LODE?]

JRF-S (1979) 63 WEST NANTYCREIAU. Two crosscut levels to W to SW contin. of Nantycreiau V., here ENE in Frongoch. Also shaft on vein & surface trials on N side of Pen Dihewid [? = "Old Level" on 2½" map at 7795 7995]

Vein well mineralised, esp. w. sphalerite.

RSN('04) 19 Field trip (785 798) Sphal, gal, Qz
a little Cerussite. No hemimorphite found,
— is from middle adit dump, higher up
in dense forest.

1" 127 SN 742 880

NANT-Y-CWPL, Ceulanymaesmawr, Card.

JRFS (1979) 47. Trial shaft prob. for HAFAN V. Now under waters of reservoir.

1" 127 SN 764 868

NANT-Y-MÔCH, Melindwr, Card.

OS 6" map shows "Shaft" at SN 764 868, above Nant-y-môch.

JRF-S(1979)48. Trial pits poss. for NE contin. of E. DARREN V., supposed to have met a NW X-vein in the vicinity.

OTJ (1922), 67

N

SILVER STREAM or BROOK I" 127 MINE, Melindwr, SN 705 814 Card 705815

= BLAENDYFFRYN or NANTYRARIAN MINE

See also ESGAIR NANTYRARIAN M.

OTJ (1922) (88) Pb. p148. Shafts & adits ca 1 mile E of Goginan. BLAENDYFFRYN SHAFT on N lode. Another on S lode 200 yds to SE

WWS (1848) (68) "Nant yr arian Mine" Not. wkg.

JRFS (1979), 52. = NANTYRARIAN = BLAENDYFFRYN = SILVER BROOK, SN 705815. Small trials, active ~1855, 1852, early 20th Cent., on 2 EW veins in lower Frongoch. 25 tons lead ore recorded.

MJ (1855) Output figures.

WJL (1967) 22, 193.

DEB (1975), 2, 45.

1" 127 SN 667 777

NANTYRONEN, Upper-Llanfihangel-y-Creuddyn, Card.

JRF-S(1979) 56. E-W vein in Frongoch, tried by shafts.

1" 139 Approx. SN 386 601

WHEAL NEPTUNE, Llanllwchcaiarn, Cardigans.

GWM (1971) 64 Acc. to W J Lewis (1967), working in 1747 & late 1860's, with lead in quartz & mundic [pyrite] in sandstone. Said to have been old workings in field behind Vrondoley house, but no trace now. Photo p56 shows operations in quarry at S end of New Quay.

WJL (1967) Map, p 237; p 116. Lead mine — "NEW QUAY"

JRF-S(1979)89. NEW QUAY = WHEAL NEPTUNE

~ 386600 Lead ore reportedly worked near here in 1747, by opencut. Reopened briefly between 1850 & 1860. No records. Exact site unknown

1"127 SN 664 895

NEUADD-FAWR, Ceulanymaesmawr, Card.

JRF-S(1979)30. Trial shaft in Frongoch beds -for E contin. of Alltycrib lodes?

NEUADDLWYD MINE, Ysgubor-y-coed, Card.

See BRYNDYFI MINE 6893

NEW CASTELL MINE, Cwmrheidol, Card

See CASTELL MINE 77 80

1"139 SN 30 40

(NEWCASTLE EMLYN) area, Card.

See under Carm.

(Monazite)

NEW LEVEL ? Melindwr, Card

See LEVEL NEWYDD 7082

NEW LISBURNE M., Caron-uwch-clawdd, Card.

See CARON M. 7265

Upper Llanfihangel y Creuddyn

NEW LODE, Cwmystwyth, 1 Card.

See CWMYSTWYTH, COPA HILL, & KINGSIDE WKGS.

= FOX'S LODE, one of the PENGELLAN LODES

NEW LOGALLAS M., Ysbyty Ystwyth, Card.

See DOLOGAU M. 7773

1" 139

NEW QUAY, Llanllwchcaiarn, Card.

See Wheal NEPTUNE 3860

[WJL (1967) Map, p 237. Lead mine]

NORTH CARDIGAN MINE, Coulany..elr, Card

See ALLTYCRIB 64 89, 65 89

1" 127 SN

OCHR RHOS Card.

WWS (1848) NSt wkg. (62)

1"127 SN 6750 9170

PANDY MINE, Ceulanymaesmawr, Cardig.

See also POLCLETTWR, CLETTWR, BRYNARIAN, PENSARN M's

(Rothwell & Mason (1992) UKJMM 11 30-40. PANDY M., on N side of Afon Cletwr 1.5 km E of Tre'r-ddol (SN6750 9170), is small trial on on E-W lode, active as late as the 1940's. X-cut levs to N from river bank. Walking upstream from Pont Com Pandy, main level is obvious 1st one. About 15 m further upstream reached by awkward scramble, is smaller lev. which cuts a narrow (<20cm) vein a few metres from entrance. Galena, cub-oct xls to 2cm, overgrown by quartz, both coated by thin films pale green pyromorphite. Wulfenite, tab. to 2mm, zoned greenish to yellow margins, and orange bipyr., in cavs in breccia or on the

quartz e galena e often partly overgrown by pyromorphite. Wulf. ident. vis.

PANT AR HIRION, Llanafan, Carol.

See PANT AU HIRION 70 72

1" 127 SN 704729

PANT ~~AR~~ AU HYRION Llanafan Card

=GROGWYNION N. MINE | See also GROGWYNION MINE

WWS (1848) Very pure ore was here raised from a shallow level. (28) PANT AR HYRION

OTJ (1922) (55) Pb. 140: PANTAUHIRION. Shaft ½ ml NW of Grogwynion. Lead ore

OS 2½" map shows "Mine" at 703 729 just N of "Pant-yr-hirian" house.

JRF-S (1979) 75 PANTAUHIRION=N. GROGWYNION Vein, in Frongoch, prob NW branch of Those

worked at GROGWYNION. Shafts around farm. Lead ore recorded, 1881-2.

DEB (1974, 1976) 1, 18.

1" 127 Cent on SN 704 784

PANTMAWR MINE, Upper Llanbadarn y Creuddyn, Card.
=SILVER BANK=SILVER HILL CONSOLS=S. RHEIDOL=CWMCH-YR-ARIAN
=IMPERIAL, or SILVER MOUNTAIN MINE

See also ERW-TOMAU MINE; CWM RHEIDOL etc.
RHEIDOL UTD.; NANTGLAS M

OTJ (1922) (79) Pb. p147: On Nantglas (ode N of the Aber-Devils bridge road immed. W of the 9th milestone. Adit x cut (790'OD) to S (ca 1845) from near the stream ¼ mi SE of Pantmawr farm. Reached lode at depth of 15 fm & driven E on it to boundary. Working again ca 1860 as "SILVER MOUNTAIN" - deepened to 25 fm below adit. Lead ore

FJN (1962) 71 A company founded in 1860 to rework the Imperial mine erected an engine to allow work at 25 fm below adit – too costly, though, & had to be abandoned.

JRF-S (1979) 57. PANTMAWR = IMPERIAL = SILVER MTN. = SILVER BANK = CNWCH-YR-ARIAN = SILVER HILL CONSOLS = S. RHEIDOL Cent. on 704 784. At times part of RHEIDOL LTD [qv] Nantglas V., a little N of E in Frongoch beds. Adit at SN 704 785 at 790 ft OD driven S to vein, cut at 90 ft. Worked to 25 fm below, workings connected w. NANTGLAS M. to E. Worked 1845 -1856, 1860. Lead ore. Min Journ (1856, 1860).

WJL (1967) 338

1" 127 SN 759 719

PANT-Y-FFYNNON, Ysbytty Ystwyth, Card.

See also GLOG

JRF-S (1979) 77. Trials for E extensions of the GLOG lodes – no information

OS 2½" map has "Old Shaft" at 7595 7190

1" 127 SN 747 723

PANT-Y-GWAITH, Ysbytty Ystwyth, Card.

See also LOG-Y-LÂS M., LISBURNE Mts.

JRF-S(1979) 77 Trials on E extension of Log-y-las vein in a small valley. Fairly extensive but no records – possibly included in LISBURNE group output

1" 127 SN 762 801

PARC-GWYN, Cwmrheidol, Card.

JRF-S(1979) 55. Trials on vNE Castell vein in lowest Frongoch e top Gwestyn.

1" 127 SN 66693?

PARK GATE ? Llancynfelyn. Card.

cf PARK LODGE ; LODGE PARK cc TRIAL

WWS (1848). "Wkg" (III)

1"127 SN 6693 ?

PARK LODGE ? Llancynfelyn Card.

cf PARK GATE; LODGE PARK CU TRIAL

WWS (1848). "Being worked on a very small scale by men from Tre'r Ddol" (qv) (112)

cf Loveden.
OS 1" map shows "Lodge Park" ca 1ml N of Tre'r-ddol, around SN 6693

PENBWLCH Sh., Ysbyty Ystwyth, Card.

See GLOG FAWR 7571

1" 127 SN 71 78 ??

PENCLAYEN MINE, Upper Hanbadarn y Creuddyn, Card.

See also RHEIDOL UTD. MINES

OTJ (1922) Pb.

1" 127 SN 77-78, 77-78

PEN CORBED, Upper Llanfihangel y Creuddyn, Card

See also TY GWYN ~~PEN CORBED~~ DOLWEN (?=)

WWS (1848) with Ty Gwyn.

OS 2½" map shows "Pen Corbed" as a hillside between Ty Gwyn and Dolwen mines, (GOTJ (1922) at around SN 778 781. Dolwen mine is on Pen Corbed e may be this mine — or the shafts e levels at the foot of Pen Corbed may be it — ca 775/778

PENGEULAN LODES, Cwmystwyth, Upper Llanfihangel y Creuddyn Card.

See CWMYSTWYTH, MINES etc ~~COPA HILL, and KINGSIDE WKS.~~

Upper Llanfihangel y Creuddyn

PENGLIN [=PENGELLAN] LODES, Cwmystwyth, Card.

See CWMYSTWYTH, ~~CORA HILL, & KINGSIDE WKGS.~~

1" 127 SN 71Q 824

PENGRAIGDDU MINE, Melindwr Card.

See also LEVEL NEWYDD; CAE NANT; BWLCH; GOGINAN

OTJ (1922) (80) Pb. Worked only 1856 – 9 tons p82 On LEVEL NEWYDD lode, and ¼ ml to E Lead ore. The LLETTYMARALLT ADIT, obliquely into hillside, recently cleared

JRF-S (1979) 52. At N end of LEVEL NEWYDD V. e on other Vs, generally N of N in Frongoch mudstones. Ancient in part. Adit at 980 ft OD. Worked to 12 fm below adit at PENGRAIGDDU SH. Some work at adit level (= LLETTYMARALLT LEVEL)

in 1919.

DEB(1975), 2, 44.

1" 127 SN 737.5 700.5

PENLANFACH MINE, Ysbyty Ystwyth, Card. (I)

See also GLÔG FACH LODE

OTJ (1922) 123 On E side of Ffair Rhos-Ysbyty Ystwyth road, ca 1 ml S. of Y.Y. glôg fach lode supposed to pass through it & trial made by adit N into hill from side of road to glogfawr. Soon intersected a lode, & driven E ca 140 fm. Some ore in a rise to surface ca 20 fm E of mouth, & bunches for 50 fm E-ward. A shaft sunk to 32 fm (25 fm below adit) & a level 30 fm W & 40 fm E driven in a lode 1-5' wide, with spots of lead & copper ores only.

A X-cut N @ W end intersected a barren lode at 18 fms.

In recent years another adit driven deeper ca 40 fm nearer road met a lode with galena & followed it E for 40 fm.

In med. W of road lodes pass under thick boulder-clay & costean pits failed to reach rock.

JRFS(1979)79-80: PENLLANFACH, at 737 700 Vein a little N of E in Frongoch beds, prob. SW contin of GLOGFACH V. [q.v.] Trial adit driven N to vein 1877-85; vert. sh. to 25 fm below level (32 fm from surface) to 5 ft but poor vein. Another

PENLANFACH MINE, Ysbyty Ystwyth, Card. (II)

level driven later, deeper – some galena found in veins, but still poor, so abandoned.

Might be more favourable to W, as veins converge this way?

WJL (1967), 189:

DEBick (1974) Pt I, 30:

PENLLANFACH M., Ysbyty Ystwyth, Card.

See PENLANFACH M. 7370

PENPARC M. Up. Llanf-y-Cr., Card.

See WEST CWMYSTWYTH M.

CWMYSTWYTH WEST M's 7973

1" 127 SN 65990x
658901

PENPONTBREN MINE, Ceulanymaesmawr, Card. (I)

See also PENPONTBREN UCHAF MINE; ERGLODD, PENYBANC., RHYD-FACH

cf PEN Y BONT PREN (of WWS 1848)

OTJ (1922) (81) Pb/Zn. p147. Old mines, next to PENYBANC ca ½ ml N of Talybont. An adit (315'OD) from E, & another from W side of hill (350'OD) nr. Hobson's sh. Most workings from shafts on the ridge. p22: Map p22-3. Lodes. Lead & copper ores, blende.

WWS (1848) PEN Y BONT PREN lodes:
Working under direction of Mr John Taylor.
S lode (No 93), N lode (No 94) & a cross
lode (No 95)

JRFS (1979) 26 = PENY PONTBREN = PEMPOMBREN,
Several veins in Frongoch., usually worked
with ERGLODD M.
HOBSONS Sh on W side of hill near W
adit; ENGINE Sh on top of ridge near
opencut. Adit to W at ~315 ft OD from
near Rhyd-fach farm. Closed 1870.
Lead and zinc ores recorded.

MJ (1853-5)
WJL (1967) 96

PENPONTBREN MINE, Ceulanymaesmawr, Card. (II).

DEB (1976), 3, 39 History.

PENPONTBREN (UCHAF) MINE, Cwmlanymaesmawr, Card.

See LERI MINE, also PENPONTBREN MINE
67 88

1" 127 SN 736 783 (3 of 7)

PEN RHIW MINE, Cwm Rheidol Card (I) 737786

See also MARIA MERCH, YSTUMTUEN MINES, NANT EOS. ABERYSTWYTH MINE; CWM RHEIDOL; BWLCHGWYN M.

WWS (1848) & NANT EOS MINES [qv] "wkg" (57) Includes NANT EOS, GWAITH GOCH, ESTYMTEON [YSTUMTUEN]. under Mr. John Taylor

OTJ (1922) Pb/Zn. Included in Aberystwyth mines p96-7 galena, pyrite, marcasite. Irregular ore-bodies adjoin YSTUMTUEN MINE [at one period worked together].

OS 2½" map shows house "Pen-rhiw" at SN 736 783

WJL (1967) Map, p170 Labels "Pen-rhiw" the mine SSE of "Ystumtuen" ie 730 781

e at 737 787

J.G. Raybould, PhD Thesis, Aber., (1973)

Shaft 150 m NE of Ystumtuen village, now inaccessible. Sphalerite; much pyrite & marcasite; quartz; ankerite; galena; chalcopyrite, much altered to malachite.

JRF-S(1979) 62 PENRHIW = NANTEOS 737 786 = NANTEOS and PENRHIW = ABERYSTWYTH M's. Worked from shafts on Castell Vein, N & E to almost EW, in Frongoch; sunk to 40 fm below adit = 86 fm from surface. Lower parts poorer. Active 1839-82, 1910-17 At times worked together and also

PEN RHIW MINE, Cwmrheidol, Card. (II)

with TY'N-Y-FRON, YSTUMTUEN and CWMRHEIDOL as "ABERYSTWYTH MINES"
Lead & zinc ores, pyrite.
MJ (1839 → esp after 1850).

WJL (1967): 111-2, 173, 176. [& v. supra]

DEB (1975), 2, 25. Early name = PENY BERTH

John Williams Catal (Winter 1994) Linarite, ramsbeckite (platy), schulenbergite, brochantite, [Rich

coatings of small but good xls.]

JS Mason & DL Green (1995) UKJMM 15, 21-27 PENRHIW M., Ystumtuen, Dyfed. On old dumps, abundant xline ramsbeckite, schulenbergite & posnjakite. At least 3 episodes of IJ min'ln w. abundant sphalerite, galena, marcasite, pyrite, chalcopyr. Instabie of pyrite-marcasite critical in forming the assemby of 2J minerals. Also anglesite, brochantite, cerussite, covellite, hemimorphite, lautenthalite, linarite and serpierite. chalcopy, cuprite, hydrozincite, leadhillite, queitite (1 sped), flat sulphur xls; wroewolfeite.

PENRHYNGERWIN MINE, Ysgubor-y-Coed, Card

See LOVEDEN MINE 66 94

1" 127 SN 667912

PENSARN MINE, Llangynfelyn Card.

See also BRYNARIAN MINE

OTJ (1922): Included with Brynarian mine p 131.

JRF-S (1979), 27. On a NNW vein in Lower Frongoch. Worked 1850-3 with BRYNARIAN.

DEB (1976), 3, 41

PENSHAFT, Up. Llanf.-y-Cr., Card.

See CWMYSTWYTH WEST; TY'N-Y-GLOG.

78 74

1" 127 Cent. on SN 789741

PENTRE (BRUNANT) M., Up. Llanf.-y-Cr., Card.

See ~~[illegible] CWMYSTWYTH M.S.~~ CWMYSTWYTH WEST M., ~~BWLCH-Y-GWYNT M., TYN-Y-GLOG M.~~

SJSH (1981) p11. "BRUNONT" appears to refer to shallow adit of PENTRE M. within village of Cwmystwyth itself.
p 19 Plate II ~~[illegible]~~ 19th Cent map labels Cwmystwyth village "PENTRE BRUNANT"
p. 66 "BRINANT"

WWS (1848) Only a long level driving.
"PENTRE BRUNANT"

1" 140 SN 648 533

PENTRE TRINANT Llandewi Brefi Card.

See also LLANDDEWI BREFI

WWS (1848) ⑥ Only a short level driven

GWH (1971) 69. WD (1815) mentions small trial ca 1800 at CWM ROBERT. CWM ROBERT included in LLANDEWI-BREFI UND. leases in 1856, with adit 40 fm long to large lode with quartz, calcite, blende, silver-lead ore (as Ag-ous as Llanfair Clydogau).

Level not now visible, but said to be in ravine above Wern-coli house — shown on an 1834 OS map as the Pentre Trinant of WWS (1848).

JRF-S(1979) 87 CWM ROBERT, NEW vein tried by level betw 1856 & 1859; ore said to be silver-rich.
MJ reports 1856-60 on Llandd. Brefi

PENYBACH MINE, ? Talybont, Card.

M. Cooper et al, (2009) MM, 73, 235-250
Steverustite, 3 samples

? Penybanc SN 6590
? Pentrebach SN 648902

1" 127 SN 65 NW 905

PEN Y BANC, Llangynfelyn Card

See also PENPONTBREN ; ERGLODD.

WWS (1848) Abandoned 1845-6 (96)

OTJ (1922) (82) Pb 23, p147 See PENPONTBREN
(Remarks also apply to PENYBANC)

JRF-S (1979), 25 Small mine on ~EW vein in Frongoch rocks. Worked at times with PENPONTBREN & ERGLODD Mls. History. (MJ 1850-51).

WJL (1967) 96

DEB (1976) 3, 39.

(Rothwell e) Mason, (1992) UKJMM 11 30-40. Wulfenite, one spec. from dump (small, isolated), at SN 6984 9026 of pyromorphite-coated mudstone. One, tiny (0.25 mm) brown bipyr. in a cavity in quartz, lined w. green microxl. pyromorphite.

PENYBERTH M., Cwmrheidol, Card.

See PEN RHIW M.

PEN Y BONT PREN LODES, Ceulanymaesmawr Card.

See PENPONT BREN (of OTS 1922) ?? 6590

WWS (1848). Working under the direction of Mr. John Taylor. Includes S Lode (93), N Lode (94) e a cross lode. (95)

PEN-Y-BWLCH Sh., Ysbyty Ystwyth, Card.

See GLOG FAWR 7571

? 69 84

PEN Y CASTELL (Tirymynach, Card) "Montgom."

See LLETTYHEN

WWS. (1848) p 662. Psilomelane on same lode as DROSGOL (q.v.) further W, at Pen-y-Castell.

[NB LLETTYHEN mine, Cardiganshire, by Pen-y-Castell is on Drosgol lode. Pen-y-Castell, Montgom. is by VAN MINE [qv] on Van Lode]

Colterell (2009) J. Russ. Soc. 12, 15-25. Mention

1" 127 (I) SN 66$_0$ 85$_5$ Card 655 856

PEN Y CEFN, Tirymynach, =COURT GRANGE MINE | See also E. PENYCEFN

WWS (1848) "Wkg." (83)

OTJ (1922) (83) Pb/Zn p60: 2ml ENE of Bow St Stn. Rock = minutely brecciated soft Frongoch mudstones. At E end of the workings the lode splits into two branches, to the E not much galena but trials on outcrop for over ½ ml across the Elerch road & on to the common to the N. 400 yds E of the boundary of the common a Sward crosscut intersected a strong lode of brecciated mudstones & quartz, bearing a considerable amount of blende in

assoc. with some galena, a large amt. of cerussite & some pyromorphite. Similar material is seen at the outcrop S of the x-cuts.

RSWOB (8/65) V, 3. Galena; traces cerussite; quartz.

DC Davies "A Treatise on metalliferous mines & mining" 4th Ed, London (1865)
In 1858 Court Grange mine had just sold lead ore with 34 oz Ag ton^{-1}

JRF-S (1979) 32-3. At 655856. V. 1m to E of HAFAN V.; stakes ENE; worked in Upper Frongoch; ~5 ft wide of brecciated mudstone cement. w. quartz, with

PEN Y CEFN, Tirymynach, Card. (II).

spots & nks galena; in shallower parts much cerussite & pyromorphite. Large blocks galena found in a second V. to N, not explored in depth.

Adit ~ 430 ft OD. Engine shaft at ~ 500 ft OD N of Penycefn Farm to 50 fm below adit. Last worked 1891

MJ (1850-56), numerous reports.

DEB (1976), 3, 28.

1" 127 SN 662 857

EAST PENYCEFN MINE, Tirymynach, Card.

See also PEN Y CEFN

JRF-S(1979) 33 Trials to NE of Pen-y-cefn, on same lode; on which level to SW at ~600ft OD, & shafts on hillside above; worked 1850-1853. At surface much cerussite, some pyromorphite in the vein.

MJ (1850-3) in Penycefn reports.

1" 127 SN 74 4 71 3?5?

PEN Y GIST LODE, Ysbyty Ystwyth, Card

See also LOG-Y-LAS MINE, HENDREFELEN MINE

WWS (1848) (16) of LISBURNE MINES (q.v.). "Working"
(17) → PEN Y GIST S. LODE

OTJ (1922) p120 Map shows Pen-y-gist lode, with a shaft, immed. S of Log-y-las lode, & crossing level favr.

[NOT in JRF-S, 1979]

Bick ~ 744713

PENYPONTBREN M, ceulanymaesmawr, Card

See PENPONT BREN M 6590

1" 127 SN 796 858

PLYNLIMON MINE, Cwmrheidol, Card.

Dunham, Trans G.S. Glas. 21 395 (1954): Galena; blende; with rare carbonates & barium minerals

OTJ (1922) (84) Pb/Zn p91 Near Afon Tarenig, 1¼ ml N of Eisteddfa Gurig, on main Aber.- Llanidloes road. Mine in Upper Van strata, at 1750ft OD. Lead ore

OS 2½" map shows also an "Old Level" 1 ml further N, at SN 795 873

JRF-S (1979) 49. ENE vein in Van. Main

workings to W of NNE axis of a sharp antiel.
Adit N to V. at 1750 ft DD, 2 shafts on V., 700 ft to the NE, WESTERN & EASTERN Shs.
Worked 1854, 1860-4, 1866-78, 1887-91, 1895.
Lead ore recorded.

MJ (1854, 1860, 1865.)

DEB (1975), 2, 6

1" 127 SN 743807

PONTERWYD MINE, Cwmrheidol, Card.

See also LLEWYRNOG etc.

OTJ (1922) Included in LLYWERNOG

JRF-S (1979) 54-5 PONTERWYD MINES = LLYWERNOG MINES - group name, including POOLE'S, POWELL'S, BOG, CLARA, PONTERWYD M.
The shafts of PONTERWYD M. itself are just NE of Ffynnon-Cadno at SE end

S of Mynydd Pont-erwyd. Worked 19th Cent.
Several veins unite here, in lower
Frongoch beds. Lead & Zinc ores

M.J. (1852) onward

DEB (1975) 2 13, 16, 18

1" 140 SN 641 514

PONT GLAN-RHYD TRIAL, Llanfair Clydogau, Card.

See also MYNYDD BACH MINE; CROWN MINE; GWAITHVACH

GWH (1971) 69 ¼ ml above Pont G-R, from stream side, level for 32 paces, slightly E of N on thin clay vein. Small dump above & signs of surface trials on moor above.

Probably = MYNYDD BACH MINE of W. Davies (1815), discov ca. 1800 — lead & copper ores.

May = CROWN MINE of WWS (1848)

JRF-S (1979) 90 (?) = MYNYDD-BACH Small trials

for lead ore, early 19th Cent.

1" 127 SN 74 72

PONT RHYD Y GROES, Card

WWS (1848). (24) Large vein of calcite in the bed of the river

PONTYSTWYTH M., Ysbyty Ystwyth, Card.

See DOLOGAU M. 77 73

1" 127 SN 732 809

POOLE'S MINE, Cwmrheidol, Card.

See also LLEWYRNOG etc

OTJ (1922) Included in LLYWERNOG - Pb e Zn ores.

WJL (1967) 170, 193.

MJ (1852) onward.

DE Bick (1975) 2 13, 16, 18

JRF-S (1979) 54-5. POOLE'S LLYWERNOG, SN 732 809
Part of LLYWERNOG = PONTERWYD MINES group.

Vein in lower Frongoch, comes from Cefn broyno M on the W.; strike a little S of E, & a branch goes off NEW to SOUTH VEIN & another a little N of E to Bog M.

194th Cent. Lead & zinc ores.

Engine Sh. vertical to 72 fm.

1" 127 SN 729 808

POWELL MINE, Cwmrheidol, Card.

See also LLEWYRNOG etc

OTJ (1922) Included in LLYWERNOG. Pb ≥ Zn ores

WJL (1967) Map, p170, labels "POWELL" the mine SW of Llewernog, ie. 728 808. p193

MJ (1852 onward)

D.E. Bick (1975) 2, 13, 16, 18

JRF-S (1979) 545. POWELL'S LLYWERNOG, SN 729 808

Part of LLYWERNOG = PONTERWYD M[1]s complex
Several veins, in lower Frongoch. Lead
& zinc ones; 19th Cent.
Shaft to 30 fm & another 600ft to SW
to 70 fm; another on E-W vein, to 50 fm.

1" 127 SN 79-81 75?

Upper Llanfihangel y Creuddyn

PUGH'S WORKINGS, Cwmystwyth ^ Card.

See ~~Also~~ CWM YSTWYTH ~~LODES~~ MINES etc.

OTJ (1922) 113: The Western part of the CWMYSTWYTH MINES. Two important lodes, COMET, and MAIN, also branches & minor lodes, eg "GILLS" [= W contin. of MITCHELL'S]

Comet lode: galena, blende, pyrite, in x-lised quartz, occasionally calcite. Debris characteristically rusty-looking.

Main lode: galena, in quartz, not usually mixed with blende & pyrite.

Mitchells lode: galena in vughs. all blende

Above Mitchells level mostly
Below in rikes, lower, nearly

SJS Hughes (1981) "The Cwmystwyth mines".

PUMPSINK LODE, Upper Llanfihangel y Creuddyn Cwmystwyth, A Card

See CWMYSTWYTH, & KINGSIDE WKGS 87

1" 127 SN 629 865

PWLL-GLAS, Geneu'rglyn, Card.

JRF-S (1979) Trial shaft on NNE fault in Frongoch beds.

1" 127 SN ~~66 92~~ 657915

PWLL ROMAN MINE, Llancynfelyn, Card.

See also DOLCLETTWR

OTJ (1922) ~~1855~~ (85) Cu/Pb Worked only 1856. 2 tons Pb ore, 6 tons Cu ore 148. Shaft sunk between marsh & road near N end of Taliesin village. Has been confused with DOLCLETTWR

JRF-S (1979) 25: SN 657 915 On NNE veins in gwestyn rocks. Old mine, reopened 1852 Vein 30 ft wide, with galena, sphalerite. OTJ confuses it with DOLCLETTWR.

MJ (1852, 1856, 1863).

Lower Llanfih.-y-Creuddyn

RED ROCK MINE, ~~Cwmnewydion~~, Card.

See GRAIG GOCH MINE (Lr. Llanf.-y-Cr. ~~Cwmnewydion~~). 70 74

1" 127

SN 714 780

RHEIDOL UNITED MINES, Upper Hanbadain y Creuddyn Card.

See also FOXPATH, GOTHIC, ERWTOMAU, PENCLAYEN, GWAITHGOCH (Rheidol valley), NANTGLAS, RHINRIGAS, ALLTDDU, PANTMAWR; CWM RHEIDOL etc; CAEGYNON, PANTMAWR; DANIELLS.

OTJ (1922) (87) 100-103 Zn/Pb. Includes FOXPATH, GOTHIC, ERWTOMAU, and PENCLAYEN MINES. Lodes, from N to S, are GWAITHGOCH, NANTGLAS, RHINRUGOS [RHIN RIGAS], and ALLT DDU.

Although workings on lodes distinct, are connected by X-cuts.

Shaw, RP & Critchley, MF (1978) Bull PDMHS I, 69-86 (MA SL-3913). With CAEGYNON: sphalerite, galena, chalcopyrite, pyrite in quartz,

ankerite in Lr. Silur. siltstones, shales & mudstones. >2250m of levels still accessible.

JRF-S (1979) 58-59. Component mines dealt with separately [qv]. NANTGLAS (710784); RHIWRUGOS = ERW-TOMAU (712782); FOXPATH (710786); ALLTDDU = GWAITHDDU = DANIEL'S = OLD NANTGLAS (714782); GWAITH GOCH = ERW-TOMAU (711784). Lead & Zinc ores.

WJL (1967) 172, 193.

DEB (1975) 2, 34.

SOUTH RHEIDOL M., Upp. Llanbad.-y-Cr., Card.

See PANTMAWR M. 7028

RHIW R'AGOS, Upp. Llanbad.-y-Cr., Card

See RHIW RIGAS

~~RUGOS~~ 1"127 MINE SN 712 782

RHIW RIGAS or RHIW {RUGOS & Upper Llanbadarn / RAGOS LODE, y Creuddyn Card

See also RHIW RIGAS NORTH LODE; RHEIDOL UTD. MINES CWM RHEIDOL, etc.

WWS (1848). Not wkg. Contains a large proportion of blende
Lode (52)

OTJ (1922) 101 Part of RHEIDOL UTD MINES – "RHIWRUGOS" LODE. More blende than galena. Attacked at two points. Part known as ERWTOMAU MINE

JRF-S (1979) 58 Part of RHEIDOL UTD. MINES. Vein ENE in Frongoch. Large opencut; levels driven SW from NANTGLAS. Active

intermitt 1853–1883. Reopened 1915–1916
as part of ERW-TOMAH [q.v.].
Much sphalerite. MJ (1853-65) under "RH. WTD."

WJL (1967) 22

1"127

SN 677

RHIW RIGAS NORTH LODE, Upper Hanbadarn y Creuddyn Card.

See also RHIW RIGAS LODE.

WWS (1848) (53) Contains a large proportion of blende. Not wkg.

RHIW RUGOS LODE, Upper Llanbadarn y Creuddyn, Card.

See RHIW RIGAS LODE 71 78

1" 127 SN 661 902

RHYD-FACH MINE, Talybont, Cardig.

See also ERGLODD, PENPONTBREN, TY'N-Y-CRAIG.

M. Rothwell, BMSN(1998)51, 13. Cerussite, at 661 902.

RHYDTALOG MINE, 1" 140 SN 791 521

~~RHYDTALOG~~ Llanddewi Brefi pH, Card.

See also E. RHYDTALOG M.

OS 1" 140 shows "Mine (disused), in Camddwr valley 2 ml above its confluence with the Towy, by the Towy Forest, below Nant Llwyd, near 790 52₃ [A long way from Llanddewi Brefi village, & presumably, mining area]

GWH (1971) 73–75. History, descrip etc.

Jack Jack Jacky Jack, before 1770 remembered lead ore at first pure, later with blende & copper.

(on W bank)
Remains, to be hidden by Brianne Reservoir
Reopened 1850 by Mathew Francis for a few years. Most work 1870-3. Galena reported with up to 79 oz Ag ton^{-1} lead. Blende; copper, widely dissem.
E. RHYDTALOG on other side of river.

JRF-S (1979) 89: Engine V, N of E; crossed by Middle V, N-S; & New V, ~ NE. Remote.
Zinc ore more abundant than lead ore - latter v. argentif - up to 86 oz/ton in 1850 Late 18th Cent → ⇒ 1873. Finally at 25 fm level where mostly sphalerite.

1" 140 SN 792 522
793 524

EAST RHYDTALOG MINE, Caron-uwch-Clawdd, Card.

See also RHYDTALOG MINE

GWH (1971) 75 Trials opposite Rhydtalog mine, restarted 1871-3 — 3 adits driven. Lodes had spar, lead & blende.

JRFS (1979) 90 Small mine, 1871-1873, on E contin. of Rhydtalog veins

1" 127 SN

RHYD YR HENEDD Card.

WWS (1848). (116) Not wkg.

1" 140 SN 680 537 (?)

RHYS{C}OG MINE, Llanddewi Brefi, Card

See also LLANDEWI BREFI, etc.

WJL (1967) Map, p237. Lead mine, SE of LL. Br.

GWH (1971) 70-71 WD (1815) says abandoned 30 yrs back. WWS (1848) says of late unsucc. worked. [E LODE, q.v.]. Attempts to work in mid 19th Cent. on small scale.

At SN "681 528" in little moorland valley. Lode WNW tried on both sides of Nant Rhyscog, close to a ford.

[681 528 is ⅓ ml SW of Nant Ryscog stream, so the

site is more likely to be in square 6853]
[?681538]

JRF-S(1979) 86. Vein ~ EW in Frongoch.
MJ reports on Llanddewibrefi mines betw 1856-62 tell of "ancient workings" & note shallow adit for 108ft to cut vein, where sh's to 20 fm below adit. New deep adit ~~started~~ 800 ft OD recommended, started ~ 1862 at SN 685541, but not driven far - 1350 ft needed to reach vein. No output record. Closed 1862. The main mine in the Llandewi Brefi group.

1" 140 SN 68 53

RHYSGOG, EAST LODE, Card.

See also RHYSGOG GADFACH, RHYSGOG M

WWS(1848) ④ One of Sir H Middleton's mines. Of late unsuccessful

1" 140 SN 6 5 ?

RHYSGOG GADFACH, Carol.

See also RHYSGOG EAST LODE, RHYSGOG M of ESGAIR GADFACH

WWS (1848) (5) Not wkg

RIVER, or
RIVER-WORK MINE, Trefeirig, Card.

(GWAITHYRAFON MINE)

See TALYLLESSYN (TALYLLESYN) 69 83

SILVER BANK M., Upp. Llanbadarn-y-Cr., Card.

See PANTMAWR M. 7078

W. SILVER BANK M., Upp. Llanf.-y-Cr., Card.

See ABERNANT M. 6878

SILVER HILL CONSOLS, Upp. Llanb.-y-Cr., Card.

See PANTMAWR M. 70 78

SILVER MOUNTAIN MINE y Upper Llanbadarn Creuddyn Card.

See PANT MAWR MINE 7078

SILVER STREAM MINE

See NANT YR ARIAN, Melindwr, Card.

~~See SILVER STREAM MINE~~ 70 81

~~WWS (1848) (68) Not wkg~~

SOUTH WALES M., Up. Llanfih.-y-Cr., Card.

See BODCOLL M. 75 76

1" 127 SN 734 885

SPAIN, Ceulanymaesmawr, Card.

JRF-S (1979) 47. Trial level to W into E limb of an anticline on Cerrig-yr-Hafan.

STRATA FLORIDA MINE, Upper Gwennws, Card.

See ABBEY CONSOLS M. 7466

OTJ (1922)

1"127 ? SN 69 66

SWYDDFFYNON MINE ½ Upper Lledrod Card. of LLWYNMALIS

OTJ (1922) (89) Pb. Only worked in 1864. 4 tons Pb ore plus. Unident mine W of Strata Florida station

JRF-S (1979) 82-3. SWYDD-FFYNNON. Trial for lead ore near village (village at 692663) in 1864, exact site unknown 4 tons lead ore recorded in 1864

1" 127 SN 6983 and/or 6591

"TALIESIN MINE(S)" Cardiganshire (I)

Confusion between (1) mines around Taliesin or Tre-Taliesin village, at 6591 just S of Tre'r-ddôl and N of Talybont, and (2) Gwaith-yr-Afon mine, at 6983, in Trefeirig parish.

D.C. Davies (1858) A NW-SE trending lode - an exception to the general trend of the Talybont lodes [∴ option (1) above]. The galena has not much silver; a little blende [sphalerite]; some chalcopyrite.

OT Jones (1922) 148 TALIESIN (90) Pb lode
Returns of Pb ore under this name
in 1854-6 and 1867. May be from
LLANCYNFELYN or more probably from
BRYNARIAN [∴ option (1) above]

Not in F.J. North (1962)

DE Bick (1978) 3 42. LLANCYNFELIN M =
TALIESIN, at 651 921 [∴ Option (1)]

J.R. Foster-Smith (1979) 35 TALIESIN = GWAITHYRAFON,
Trefeiriog, at 690 839. [∴ Option (2)]

"TALIESIN MINE(S)", Cardiganshire (TT)

JRF-S (1979), 35 (cont'd). O.T. Jones (1922) applies name "Taliesin" to LLANCYNFELIN MINE [qv] which is at Tre-Taliesin – it is clear from Mining Journal reports that he is wrong – (M. Journ 1853–1863).

WWarington Smith (1848) Working. A N-S lode said to have been very productive. Mine (98) TAL-I-ESSIN Mine (76) CWM SYMLOG W e N not working now [:. Option (2)]

1" 127 SN 76 89 90

TAL Y BONT MINES Card.

FOR "TAL Y BONT MINE" See ALLT Y CRIB

See also TAL Y BONT BRIDGE; ALLT-Y-CRIB; TAL-I-ESIN TRE'R DDOL, BRYN YR ARIAN, DOLCLETTWR, NEWBOG, LLANCYNFELYN

WWS (1848). "The Tal y bont mines very successful last century, but lately abandoned from poverty in depth." Includes ALLT Y CRIB, N. LODE & S. LODE & three S. branches.

DC Davies (1888) A belt of mines, including TALIESIN, TRE'R DDOL, BRYN YR ARIAN & TALYBONT. The galena has not much silver; there is a little sphalerite & some chalcopyrite

1" 127 SN 76 89

TAL Y BONT BRIDGE, Card.

See also TAL Y BONT MINES; ALLT-Y-CRIB.

WWS (1848). NSR wkg. (87)

1" 140 SN 617 480

TAN Y GAER, Cellan, Cardigans

GWH (1971) 65. Trial adit 2½ ml E of Lampeter in E bank of stream 60 yds above lane crossing, driven 75 paces to a lode then 30 paces S 35°W on lode. Lode a foot of quartz w. galena x/s. Shallow trials on outcrop at a small waterfall. W Davies says discov. 1807 & mentions VACH DRE mine found in 1806 to the S – site lost now.

JRF-S (1979) 90 Trial level on a small

EW vein with galena in quartz.

1" 127 SN 734 748

TAN-Y-LLETHR, Up. Llanfih.-y-Creuddyn, Card.

JRF-S (1979), 66. Several unsucc. small trials, unrecorded, in Frongoch beds on line of Frongoch Vein.

PT 127 SN 6489/6589?

TANYRALLT MINE, Ceulanymaesmawr, Card.

See also ALLTYCRIB MINES

OTJ (1922) Pb. 54 Assoc. with Alltycrib mines
p 23 galena

JRFS (1979) 28 [No NGR]. Small mine on NNE vein in lower Frongoch e poss some V's just N of main ALLTYCRIB M. Usually worked with Alltycrib but sometimes separate.

MJ (1850-65) under "Alltycrib".

TAYLOR's ADIT, Up. Llanf.-y-Cr., Card.

See CWMYSTWYTH WEST M's. 7973

1" 127

SN 748 792
749 793

TEMPLE MINE, Cwmrheidol

Card.

OTJ (1922) (91) Zn/Pb. Worked only 1887. 3 tons Pb ore
20 tons Zn ore

p148-9 Adits on lode 11° to e50 yds S of, the Castell lode in Rheidol gorge W of Ysbyty Cynfyn. On dumps, lode stuff is brecciated mudstones with quartz, blende, galena. p 29.

J.G. Raybould, PhD Thesis, Aber., (1973). 100m W of the Rheidol, CASTELL LODE worked by an adit. — quartz. 50m to the S, the parallel TEMPLE LODE

worked by 2 adits:-
LOWER, 6'30' OD. Stoped 75 m W of entrance. galena; hydrozincite on walls; quartz; calcite. E of stope, quartz-breccia veins with sphalerite, some galena.
UPPER, 700' OD. Sphalerite; ankerite; some quartz; galena; a little chalcopyrite.
JRF-S (1979) 62-3 At 749 793. Small workings on Castell V., main workings on subsid vein to S, with ENE strike, in lower Frongoch. Much sphalerite on dumps. 3 tons lead ore, 1887
WJL (1967) 193.
DEB (1975) 2, 27.

1" 127 SN 6 8

THOMASS UNITED MINE ? Trefeirig Card.

See ~~de [illegible]~~ CWM SEBON

OTJ (1922) (92) Pb/Zn p149 ? = S. DAREN m 1855-1856
[= CWM SEBON]
6 8 83

TREDDOL MINE, Llancynfelyn, Card

See ~~TREDDOL~~ DOLCLETTWR & NEW BOG M's.

6591

TRE'R DDÔL MINE, Llangynfelyn, Card.

See DOLCLETTWR, and NEW BOG MINES
6591

1" 127 SN 6 9 (?)

TRE TALIESSIN ?Llancynfelyn Card Card (?)

cf TAL-I-ESSIN

WWS(1848) p. 659. NW→SE lode said to have returned considerable quantities of lead ore

TROED-RHIW-CEIR, Upper Hanf.-y-Cr., Card.

See ABERNANT M. 6878

1" 140 SN 772 476

TROED-RHIW-RUDDWEN, Llanddewi Brefi, Cardigans.

GWH (1971) 76. Adit, now collapsed, a few yds E of gate across lane at sharp bend by river bend ½ mi below T-r-R farm. Said to have been dug ca 100 yrs ago by 2 men, one killed in roof-collapse. Specks of copper ore in quartz visible in the river.

JRF-S (1979) 91 with traces ~ 1850. Soon abandoned. Trial on quartz vein chalcopyrite and galena

1" 139 SN 32 45

TROEDYRAUR Cardigans.

GWH (1971), 64. Samuel Lewis (1849) refers to a tradition that gold once worked "at the foot of the eminence on which the church stands" — village name derived from the tradition, not vice versa. No trace now. 9m E 5°S of Cardigan.

JRF-S (1979) 89. GWH (1971) refers to trials for gold near village. Nothing known.

1"127 SN

TRWYN Y BUARTH Card.

WWS (1848). "Wkg". (113)

1" 127 SN 68 83

TWLL Y MWYN MINE, Trefeirig, Card

See also CWM DAREN M.

DEB (1976) 3 15 TWLL Y MWYN became part of CWM DARREN

1" 127 SN 755 725

TŶ-COCH, Ysbyty Ystwyth, Card.

See also LOG-Y-LAS, LISBURNE M's.

JRFS(1979) 78 Unsucc trials to prove E extension of LOG-Y-LAS vein

1" 127 SN 665 892

TY GWYN, Ceulanymaesmawr, Card.

[cf TY GWYN, Upper Llanfihangel y Creuddyn, 777]

JRFS (1979) 30 Trial level to E in Frongoch
beds

1" 127 SN 772 775 (on S side of river)

TY-GWYN M. and PEN CORBED Upper Llanfihangel-y-Creuddyn, Card

See also PEN CORBED; [TYGWYN, Callanymaesmawr 6689] DOLWEN

WWS(1848) ["Ty Gwyan and Pen Corked" mentioned as a single lode] not working Lode (45)

OTJ (1922) p146-7 (75) TYGWYN or MYNACH VALE. Pb ore 2 shafts to lode. Shallow adit, ca 850'OD. Dumps have considerable amts of chalcopyrite assoc with blende & some calcite. Lead ore returned.

JRFS (1979)64: MYNACH VALE=TY-GWYN=DE BROKE 2 Shafts; W on vein to 25 fm below adit, E to 50

fm below adit. NE vein in Frongoch. Good ore said to remain in sole of 50 fm level at E end. Much sphalerite though not worked – lead ore produced, 1878–1884.

1"/27 SN 698 796

Ty LLWYD, Cwmrheidol, Card.

See also GELLI'R EIRIN; CWM RHEIDOL etc;

WWS (1848) (60) Twelve tons ore raised in last working

OTJ (1922) (93) Pb p149 Small mine on W of GELLI'REIRIN. 200yds N of road in Rheidol valley. Several old adits: deep adit 230'OD at base of hill, length unknown. Lead ore

JRFS (1979) 59-60. ENE vein in Frongoch. Several levels driven NE from Rheidol valley, deepest at 230 ft OD. Vertical

shaft near portal to ~ 60 ft. Higher levels, worked pre-1845, said to have been fairly rich. Reopened 1851-56, when lead ore recorded

MJ (1851-56)

DEB(1975) 2, 32

1" 127 Cent. on SN 695 887

TY-NANT, Ceulanymaesmawr, Card.

See also BWLCH-Y-DDERWEN

JRF-S (1979) 31 Numerous small trials in basal Frongoch at lower end of Nant Bwlch-y-dderwen. No major vein known, but NNE fractures assoc. w. a small anticline to W.

TYNEWYDD MINE Card (?).

[cf TYNEWYDD under CEFN YR OGOF, Denb].

FJN (1962) 71. A 40' wheel erected in 1870 but could not be paid for

1" 127/140 SN

TYNS CYNOELIN MINE, ? Card.

G & L (1858): Chalcopyrite

1" 127 SN 669 902

TY'N-Y-CRAIG, Ceulanymaesmawr, Card.

See also RHYD-FACH; ERGLODD, PEN PONTBREN

JRF-S (1979), 28. Trial crosscut to N in Gweslyn prob. for a W extension of Esgairhir V.

1" 127

SN 75-77, 79-80
7478 7479 7579
7579 7679 7680

TYN-Y-FFORDD Cwmrheidol, Card.
See also CASTELL MINE

J. G. Raybould, PhD Thesis, Aber., (1973). CASTELL LODE:

An adit [761 802] N of Ty-nant farm, [which is] at 7620 7996. — quartz; much galena and sphalerite; a little ankerite; one specimen chalcopyrite.

Old Sh. to E [763 802] prob. a trial. Only quartz seen.

Shaft & adit ca 400 m to SW [759 799 — "Mine (disused)" on 2½" map] on S side of valley: Tip has much sphalerite and quartz in large, well-formed, clear x/s.

1" 127 cwm rheidol SN 724785

TYNYFRON MINE, ~~Devils Bridge~~, Card.

See also YSTUMTUEN MINES, CWM RHEIDOL, PENRHIW

OT Jones (1922) 97-8 Included in YSTUMTUEN MINES.

J.G. Raybould, PhD Thesis, Aber., (1973).
Chalcopyrite abundant; sphalerite abundant; galena abundant; marcasite very common; pyrite; quartz.

JRF-S (1979) 61-62 Considered with CWM RHEIDOL (730783) & YSTUMTUEN M. (732788) with which usually worked, esp. later. sphalerite, some galena.

On N of E Castell V. in Frongoch. Shafts; later levels - crosscuts from N side of gorge - ALDERSON'S L. (590 ft OD) to N 1400 ft to vein; lower at 330ft OD to N 1620 ft to vein. Oreshoots at Ty'n-y-fron & Ystumtuen ends but almost barren between. Also connected with PENRHIW M & worked at times with this & with BWLCH GWYN.

62 [illegible] part of "ABERYSTWYTH MINES" [See PEN RHIW]

WJL (1967) 89, 93, 96, 98, 188, 290, 337

DEB (1975), 2, 22.

1" 127 SN 692 946

TY'N-Y-GARTH, Ysgubor-y-coed, Card.

JRFS(1979) 23. Two x-cut levels to S in gwestyn rocks. Small EW veins nearby.

1" 127 SN 78 8 74 2

TY'N - Y - GLOG, Up. Llanf.-y- Creuddyn, Card

See ~~also CWMYSTWYTH M's etc~~, CWMYSTWYTH WEST M's.

~~WWS (1848) "Not wkg" (29)~~

NB OS 2½" map shows house "Ty'n-y-glôg" at SN 788 742, in NW part of Cwmystwyth.

SJSH (1981) 66 Part of "West Cwmystwyth" [see CWMYSTWYTH WEST.]. Lower level being cleared in 1869 (MJ 7/7/1869) Adits renamed "PENSHAFT" in 1878. Lead ore

1" 127 SN 651 924

TY'N-Y-LLWYN, Llangynfelyn, Card.

JRF-S (1979) Trial shafts on small NEW veins in Frongoch rocks.

1" 127 SN

TYN Y NANT, Card.

WWS (1848). "Wkg". (110)

TY'NYPWLL MINE, Melindwr Card.

See MELINDWR MINE 6781, 6881

1" 127 SN 661 924

TY'N-Y-WERN, Llangynfelyn, Card.

JRF-S (1979) 24. Trial levels and shafts on NNE fault between Frongoch & Gwestyn rocks

1" 127 SN 704 838

TY'R-RHOD M., Melindwr, Card.

=CWMSYMLOG NORTH M.

OTJ (1922) 136 (31) Pb, CWMSYMLOG N., trial near EAST DAREN M.
p 67. E. DAREN M.

WWS (1848) (76) Not working. CWM SYMLOG N.

JRF-S (1979) 49 TY'R-RHOD = CWMSYMLOG NORTH.
Trials for E contin. of E. Daren vein:
xcut level to N from N side of mine reservoir, another to E from ~550 ft E of the first.

4

VACHDRE MINE, Cellan(?) Cardigs.

See TAN Y GAER 6148

VAUGHAN MINE, Tirymynach, Card.

See LLETTYHEN MINE SN 68

75 71

WAEN-LOI, Ysbytty Ystwyth, Card.

See GLÔG-FACH, GLÔG-FAWR.
7470, 7570

WELSH POTOSI, Ceulanymaesmawr, Card.

See ESGAIR HIR, and ESGAIR VRAITH.
7291 7391 7491

WEMYSS MINE, Upper Hanfihangel y Creuddyn, Card

See FRONGOCH W. MINE 7074, 7174

1" 127 SN

WEN ALLT Card.

WWS (1848): "Nor wkg" (40)

? Bodcoel area ??

WILLOW BANK MINE, Trefeirig, Card.

See LLECHWYDD HELIG 6884

1" 127

SN 667 929

Y-FOEL, Llangynfelyn, Card.

JRF-S (1979) 25: Level to E in Frongoch rocks, presum to thy NNE fault.

1"127 SN 681 932

YNYS MINE, Ysgubor-y-coed/Llancynfelyn. Card.
= YNYSTUDUR MINE

OTJ (1922) (94) Pb. p149. Small trial beside an old road, 1¼ mi NE of Fre'ddol.
Lead ore

~~JRF-S(1979) 17~~ YNYS-HIR. Trial on NNE fault (Min Journ 19/10/1850) Ynyshir House – SN 682958.

JRF-S(1979) 23. Crosscut trial level from just S of Ty-nant to ENE vein in Upper Van. Shaft & opencuts on outcrop.

1" 127 Ynyshir House: SN 682958

YNYS-HIR, Ysgubor-y-coed, Card.

JRF-S (1979) 17. YNYS-HIR. Trial on NNE fault

MJ 19/10/1850.

1"127 SN 761 787

YSPYTTY-CYNFYN, Cwmrheidol, Card.

JRF-S(1979)63 Trial level at 761787 to E in Frongoch. No details known.

Pu Sb sphalerite

1" 127 SN 706 939

YSTRAD EINION MINE, Ysgubor-y-coed, Card.

? = DOLGOCH M.

cf CWM EINION & WWS (1848)

OTJ (1922) (95) Cu/Zn/Pb. p149. On W slope of Einion Valley ca 2mls from main Aber - Machynlleth road. Lode yielded mainly chalcopyrite in assoc with galena, blende, calcite & siderite. Adit (590'OD) drains to 30 fms. Shaft to 50 fm below adit.

OS 2½" map also shows two levels nearly 1km to the NNW, near Caemardin - "Trial Level"

at SN 712 9465 and "Old Level" at SN 709 948
(See CAE-MARDIN)

JRF-S(1979) 18. Calcite with chalcopyrite & sphal e some galena in NW vein in Van mudstones. Adit at 590' OD (30 fms depth at shaft Total depth 80 fms?])
(MJ May-June 1860)

DEB (1976) 3 43.

DOLGOCH
(Rothwell e) Mason (1992) UKJMM 11 30-40 Wulfenite v. rare on dump from "Waterwheel" adit at 7070 9400 (see Hughes 1989). 0.3mm brownish bipys or thin pyromorphite films or v. pale yell crude tabs on mudstone

1" 127

YSTUMTUEN MINES, ~~Devils Bridge~~, Card. Cwmrheidol SN 729 782-6 | 732 788 (I)

See also PEN RHIW, NANT EOS etc. CWM RHEIDOL etc.
TYN Y FRON M.
= ESTYMTEON

OT Jones (1922) 97-9. Includes PEN RHIW, & TYNYFRON mines
galena, pyrite, quartz, blende, abundant
marcasite (& pyrite). Blende is principal ore.
Mine No (96) Zn/Pb mine

RSWB, TBG, GR, GS III 65-66 31/3/63. Big rusty dumps, &
large well cut adit. Much brown blende,
some galena, much pyrite & marcasite, quartz
calcite, chalcopyrite, cerussite (one xl!)

WWS (1848) ESTYMTEON LODE (56), working, of NANT EOS
MINES. p658: Bands of pyrite. Calcite,

opposite Dyffryn Castell, "where, from an admixture with iron, probably also in the state of carbonate, it weathers to so dark a colour as to have been sometimes mistaken for blende". Pyrite granular & easily decomposed.
p662: Siderite. p663: Diag. section of a lode, with chalcopyrite, quartz, blende, pyrite, & galena.

DC Davies (1888) YSTUMTYN lodes, rich in pyrite
J.G. Raybould, Ph.D. Thesis, Aber., (1973) YSTUMTUEN or CWMRHEIDOL M., Quartz; sphalerite; yellow ochre [limonite]; galena; a little chalcopyrite; much "pyrite" - probably marcasite.

YSTUMTUEN MINES, Cwmrheidol, Card. (II)

JRFS (1979) 61-62. Considered with TY'N-Y-FRON (724 785) & CWMRHEIDOL MINES (730 783) with which usually worked, esp. later. Also conn. with PENRHIW M. to E & worked at times with this & with BWLCH GWYN M. YSTUMTUEN MINE at 732 788, on Castell Vein, N of E in Frongoch. Sphalerite, some galena. Orebhoots at Ystumtuen & Tynyfron ends, nearly barren between. Early shafts on outcrop, later levels from N side of gorge as X-cuts N to vein - ALDERSON's L. (570 ft OD, 1400 ft to vein),

another at 330 ft OD, 1620 ft to vein.
p62 At times part of "ABERYSTWYTH M's" – See PEN RHIW
WJL (1967), 89, 93, 96, 99, 188, 290, 337.

DEB (1975), 2, 22.

16th September 1989 Ystumtuen Mine and area, Ponterwyd, mid-Wales. Leader: Dr. P.R. Williams. Only six members met in typical Welsh weather for this, our last field meeting of the summer. After examining the shafts and the remains of the old workings we proceeded to the western section where the vein is exposed. The outcropping vein is quite prominent and although not wide at this point some good octahedral galena crystals and associated cerussite and linarite were collected. Chalcopyrite was also in evidence.

BMS Sympos (1997) MM Spec
from "YSTUMTUEN".
Ramsbeckite, distinct rhomboidal green x/s with some green pearly hex-platy ? schulenbergite