British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

MID WALES (NORTH)
CANOLBARTH CYMRU (GOGLEDD)

Mineral Resource Map of Wales
Map o Adnoddau Mwynol Cymru

Mineral Resources
Adnoddau Mwynol

Scale 1:100 000
Graddfa 1:100 000

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Digital Cartography: N.A. Spencer, British Geological Survey.
Published 2010.

Cynhyrchwyd gan: T.P. Bide, C. Morley, A.J. Humpage, J.R. Davies a G.K. Lott.
Arweinwyr y prosiect: A.J. Humpage, J.M. Mankelow ac A. Benham.
Cartrisgrafiaeth ddigidol: N.A. Spencer, Arolwg Daearegol Prydain (ADP).
Cyhoeddedyd 2010.

This map is one of a series of six maps commissioned by the Welsh Assembly Government and co-funded by the BGS Sustainable Mineral Solutions Project and the Aggregates Levy Sustainability Fund for Wales (Contract 252/2009/09).
This map is to be used in conjunction with the accompanying guide 'A Guide to Mineral Resource Information and Aggregates Safeguarding in Wales'.

Mae'r map hwn yn un o gyfres o chwe map a gomisiynwyd gan Lywodraeth Cynulliad Cymru ac a gyd-ariannwyd gan Brosiect Sustainable Mineral Solutions ADP a Chronfa Gynaliadwyedd yr Ardoll Agregau ar gyfer Cymru (Cytundeb 252/2009/09).
Dylid defnyddio'r mapiau hyn mewn perthynas â'r arweiniyll sy'n cyd-fynd â hwy, sef 'Arweiniad i Wybodaeth am Adnoddau Mwynol a Diogelu Agregau yng Nghymru'.

BGS map reference:

Mineral Resource Map of Mid Wales - North
Bide, T.P., Morley, C., Humpage, A.J., Davies, J.R. and Lott, G.K. OR/10/023.

Cyfeirnod map ADP:

Map Adnoddau Mwynol Canolbarth Cymru - Gogledd
Bide, T.P., Morley, C., Humpage, A.J., Davies, J.R. a Lott, G.K. OR/10/023.

Aims and Limitations

The purpose of the maps in this series is to show the broad distribution of those mineral resources which may be of current or potential economic interest. The maps are intended to assist strategic decision making in respect of mineral extraction and the protection of important mineral resources against sterilisation. They bring together a wide range of information, much of which is scattered and not always available in a convenient form.

The maps have been produced by the collation and interpretation of mineral resource data principally held by the British Geological Survey.

The mineral resource data presented are based on the best available information, but are not comprehensive and their accuracy is limited by the quality of information available. The maps are intended to indicate areas within which it may be rational to delineate the surface areas within which potentially workable minerals may occur. These areas are not of uniform potential and also take no account of planning constraints that may limit their working. The economic potential of specific sites can only be proved by a detailed evaluation programme. Such an investigation is an essential precursor to submitting a planning application for mineral working. Extensive areas are shown as having no mineral resource potential, but some isolated occurrences may be found in these areas. The maps do not show the distribution of superficial deposits in all but some isolated situations. These maps need to be used in conjunction with the accompanying guide 'A Guide to Mineral Resource Information and Aggregates Safeguarding in Wales'.

The locations of those quarries active in 2010 are shown. In addition former important building stone quarries are also shown. These have been extracted from the British Geological Survey's Britpits database in April 2010. While the compilers have tried to ensure that the site details are as accurate as possible, any map of active quarries is a snapshot in time. Moving the extraction location as reserves become exhausted or a new extension starts production, and renaming of sites are regular occurrences. In addition sites may cease to be active at any time.

The maps are intended for general consideration of mineral issues and not as a source of detailed information on specific sites. The maps should not be used to determine individual planning applications or in taking other decisions on the acquisition or use of a particular piece of land, although they may give useful background information which sets a specific proposal within context.

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Amcanion a Cheyfyngiadau

Pwrpas y mapiau yn y gyfres hon yw dangos dosbarthiad cyffredinol yr adnoddau mwynol hynny a allai fod o ddiddordeb economaidd cyfoes neu posibl. Bwriadir i'r mapiau hyrwyddo'r broses o wneud penderfyniadau strategol yn ymwneud ag echdynnu mwynau a gwarchod adnoddau mwynol pwysig rhag cael eu hyntgrivel yr dd-fudd. Maent yn dwyn ynghyd wybodaeth o nifer o wahanol ffynonellau, gwybodaeth sydd yn aml yn wasgaredig ac sydd ddim bob amser ar gael mewn ffurf gyfleus.

Cynhyrchwyd y mapiau drwy gryntho a dehongli'r data am adnoddau mwynol yn meddiant Arolwg Daearegol Prydain yn bennaf.

Mae'r data a gyflwynir am adnoddau mwynol yn seiliedig ar yr wybodaeth orau sydd ar gael, ond nid yw'n data'n gynhwysfawr ac mae eu hansawdd yn amrywiol. Faliu, lledpywn yw'r ffiniau a ddangosir. Mae'r adnoddau mwynol a ddiffinir ar y mapiau yn ardaloedd lle mae'n rhesymol ystyried y gellid mwyngloddio'r mwynau hynny. Ni ddylid ystyried bod y ffiniau'n ffiniau sy'n ardaloedd hyn ac ni rodder ystyriaeth i gyfyngiadau cynllunio a allai gyfyngu ar waith cloddio. Dim ond drwy ymgymryd â rhaglen werthuso manwl y gellir profi dichonoldeb economaidd safleoedd penodol. Mae'r fath archwiliad yn waith rhagflaenor hanfodol cyn cyflwyno cais cynllunio ar gyfer cloddio am fwynau. Ni chofnodir unrhyw adnoddau mwynol o gwbl drive ardaloedd eang, ond gall hol that gwaithfeydd mwynol unigol i'w cael yn yr ardaloedd hyn. Fel rheol, nae presenoldeb y prif dyddodion drifftiau ddim ddangosir ar y mapiau hyn ond eithrio mewn ambell sefyllfa ynysig. Rhaid defnyddio'r mapiau hyn ynghyd â'r canllaw sef 'Arweiniad i Wybodaeth am Adnoddau Mwynol a Diogelu Agregau yng Nghymru'.

Nodir llediad y cheiardi hynny a oedd ar waith yn 2010. At hynny, nodir hefyd hen cheiardi cerrig adeiladau o bwys. Daw'r wybodaeth yma, a gafwyd yn Ebrill 2010, o gronfa data Britpits Arolwg Daearegol Prydain. Er bod cryntiowyr y mapi wedi ceisio sicrhau bod manylion y safle'n cywir cymaint ag sydd bosib, mae'r map o cheiardi gweithredol yn gyson ar daith hanodol. Mae symud safleo'r cloddio pan gaiff adnoddau eu dalrydlos, neu wrth i estynnad newydd ddechrau cynhyrchu, yn ogystal ag ailenwi safleoedd, yn ddigwyddiadau cyson.

Bwriadir y mapiau ar gyfer ystyried materion cyffredinol yn ymwneud â mwynau ac nid fel ffynhonnell gwybodaeth benet am safleoedd penodol. Ni ddylai'r mapiau hyn gael eu defnyddio i bennu ceisiadau cynllunio unigol neu benderfyniadau eraill ynthed ciad gaffael ar ddarn penodol o dir neu o ran ei ddefnydd, er y gallant darparu pwrpwbaeth gefndir ddefnyddiol sy'n gosod cynnig penodol yn ei gyd-destun.

Hawlfraint

Mae'r cynnych hwn yn cynnwys data mapio ar drwydded gan yr Arolwg Ordnans gyda chaniatâd Rheolwr Llyfrfa Ei Mawrhydi © Hawlfraint y Goron a/neu hawl cronfa ddata 2010. Cedwir pob hawl. 100037272.

Cynhyrchwyd y cyhoeddiad hwn gan Arolwg Daearegol Prydain ar gyfer Llywodraeth Cynulliad Cymru. Arolwg Daearegol Prydain © NERC 2010. Cedwir pob hawl. Gellir atgynhyrchu'r cyhoeddiad (ac eithrio'r logiau) yn ddi-dâl mewn unrhyw ffurnwr neu gyfrwng ar gyfer ymchwil, astudiaeth bersonol neu, gychredad o fewn rhudiad. Mae hyn yn amodol ar gael ei atgynhyrchu'n gywir ac nid mewn cyd-destun camarweiniol. Mae'n rhaid cydnabod y deunydd fel a ganlyn: © NERC, gan roddi teitl y cyhoeddiad.

SAND AND GRAVEL
TYWOD A GRAEAN

Superficial deposits
Dyddodion arwynebol

- Sub-alluvial / Tanifwaddoddol
- River terrace / Cerlan
- Glaciofluvial / Ffwdrewlifol
- Blown sand / Tywod chwyth

PEAT
MAWN

- Peat, generally more then one metre thick / Mawn, yn fwy nag un metr o drwch fel arfer

IGNEOUS ROCKS
CREIGIAU IGNEAIDD

- Dolerite intrusions with potential for high specification aggregate / Mewnwthiadau dolerit â photensial am agreg ac iddo ragfarnylion uchel
- Other igneous rocks including basalts, felsites, gabbros, tuffs and granites / Creigiau igneaidd eraill yn cynnwys, basaltau, felsitau, gabbrau a gwenithfeini

SANDSTONE
TYWODFAEN

- Sandstone with potential for high specification aggregate / Tywodfaen â photensial am agreg ac iddo ragfarnylion uchel
- Other sandstone / Tywodfeini eraill

LIMESTONE
CALCHFAEN

- High purity limestone (>97% $CaCO_3$). Carboniferous / Calchfaen Carboniferaidd pur iawn (>97% $CaCO_3$)
- Other limestone / Calchfeini eraill

SLATE
LLECHFAEN

- Slate / Llechfaen
- Slate waste / Gwastraff llechfaen

BRICK CLAY
CLAI BRICIAU

- Brick clay / Clai briciau

COAL
GLO

- Tertiary shallow coal resource (Primary and Secondary shallow coal resources absent) / Adnodd glo bas hryfddod

METALLIC MINERAL OCCURRENCES
PRESENOLDEB MWYNAU METELOG

- Pb Symbol indicates elemental occurrence / Y testun yn dynodi'r elfennau cofnodedig

HISTORIC SLATE QUARRIES
CHWARELI LLECHI HANESYDDOL

SIGNIFICANT HISTORIC BUILDING STONE QUARRIES
CHWARELI CERRIG ADEILADU O BWYS HANESYDDOL

MINERAL WORKINGS
GWEITHFEYDD MWYNOL

- Garreg, IGN — Active (name, commodity worked) / Gweithredol (enw, natur y mwydd a gloddir)
- Moldiedunn, IGN — Dormant, as defined by the Environment Act 1995 (name, commodity worked) / Segur, yn unol â diffiniad Deddf yr Amgylchedd 1995 (enw, natur y mwydd a gloddiwyd)
- Rhyader, SST — Inactive, worked out and/or restored (name, commodity worked) / Anweithredol, wedi'i ddisbyddu a/neu ei adfer (enw, natur y mwydd a gloddiwyd)

ADMINISTRATIVE AREAS
ARDALOEDD GWEINYDDOL

- Mineral Planning Authority: Unitary Authority / Awdurdod Cynllunio Mwynol: Awdurdod Unedol
- Mineral Planning Authority: National Park / Awdurdod Cynllunio Mwynol: Parc Cenedlaethol

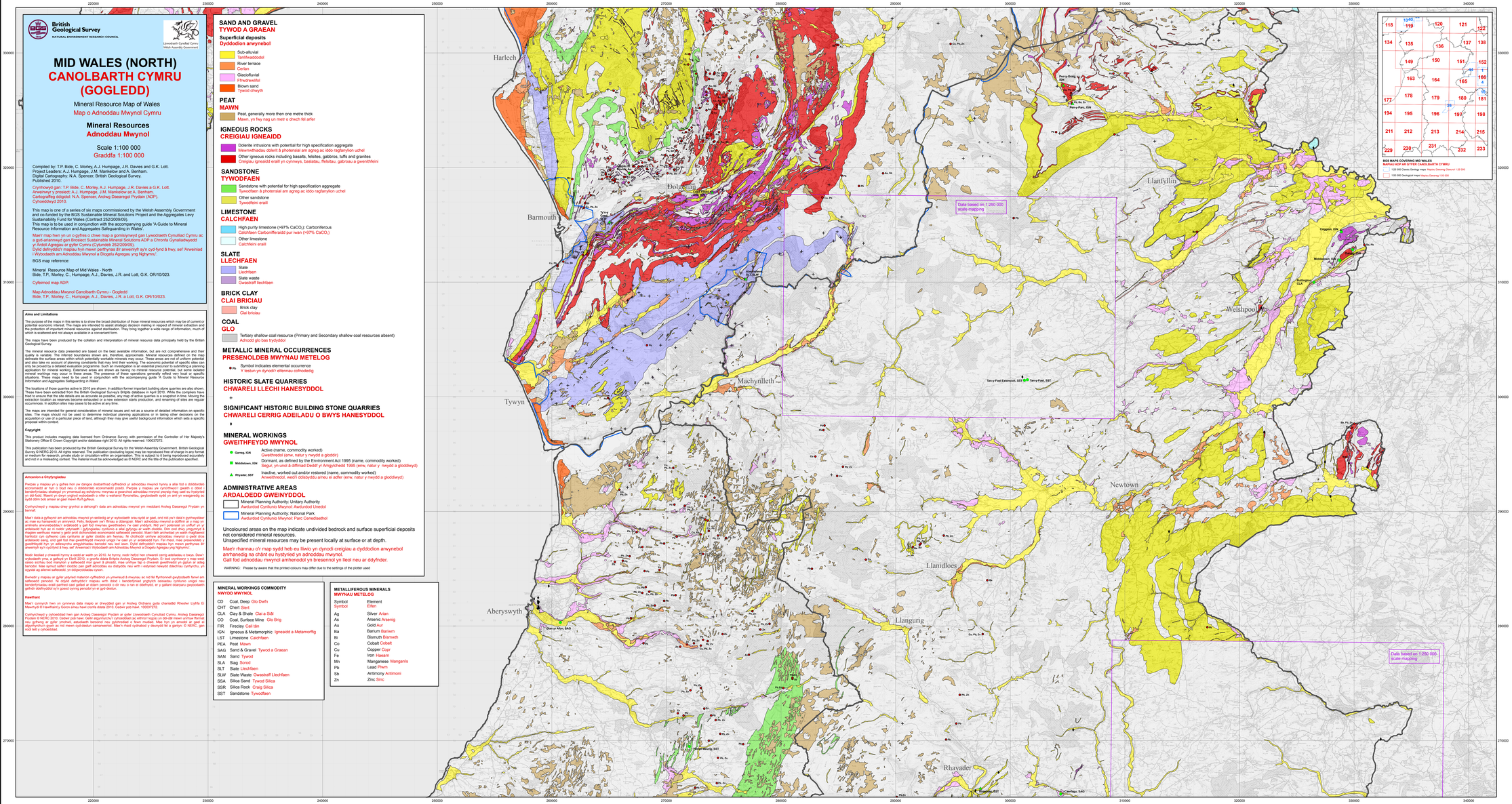
Uncoloured areas on the map indicate undivided bedrock and surface superficial deposits not considered mineral resources.
Unspecified mineral resources may be present locally at surface or at depth.

Mae'r rhannau o'r map sydd heb eu liwio yn dynodi creigiau a dyddodion arwynebol anrhanedig na chânt eu hystyried yn adnoddau mwynol.
Gall fod adnoddau mwynol amhenodol yn bresennol yn lleol neu ar ddyfnder.

WARNING: Please by aware that the printed colours may differ due to the settings of the plotter used

MINERAL WORKINGS COMMODITY
NWYDD MWYNOL

CD	Coal, Deep	Glo Dwfn
CHT	Chert	Siert
CLA	Clay & Shale	Clai a Siâl
CO	Coal, Surface Mine	Glo Brig
FIR	Fireclay	Cail tân
IGN	Igneous & Metamorphic	Igneaidd a Metamorffig
LST	Limestone	Calchfaen
PEA	Peat	Mawn
SAG	Sand & Gravel	Tywod a Graean
SAN	Sand	Tywod
SLA	Slag	Sorod
SLT	Slate	Llechfaen
SLW	Slate Waste	Gwastraff Llechfaen
SSA	Silica Sand	Tywod Silica
SSR	Silica Rock	Craig Silica
SST	Sandstone	Tywodfaen

METALLIFEROUS MINERALS
MWYNAU METELOG

Symbol	Element
Symbol	Elfen
Ag	Silver Arian
As	Arsenic Arsenig
Au	Gold Aur
Ba	Barium Bariwm
Bi	Bismuth Bismwth
Co	Cobalt Cobalt
Cu	Copper Copr
Fe	Iron Haearn
Mn	Manganese Manganîs
Pb	Lead Plwm
Sb	Antimony Antimoni
Zn	Zinc Sinc