

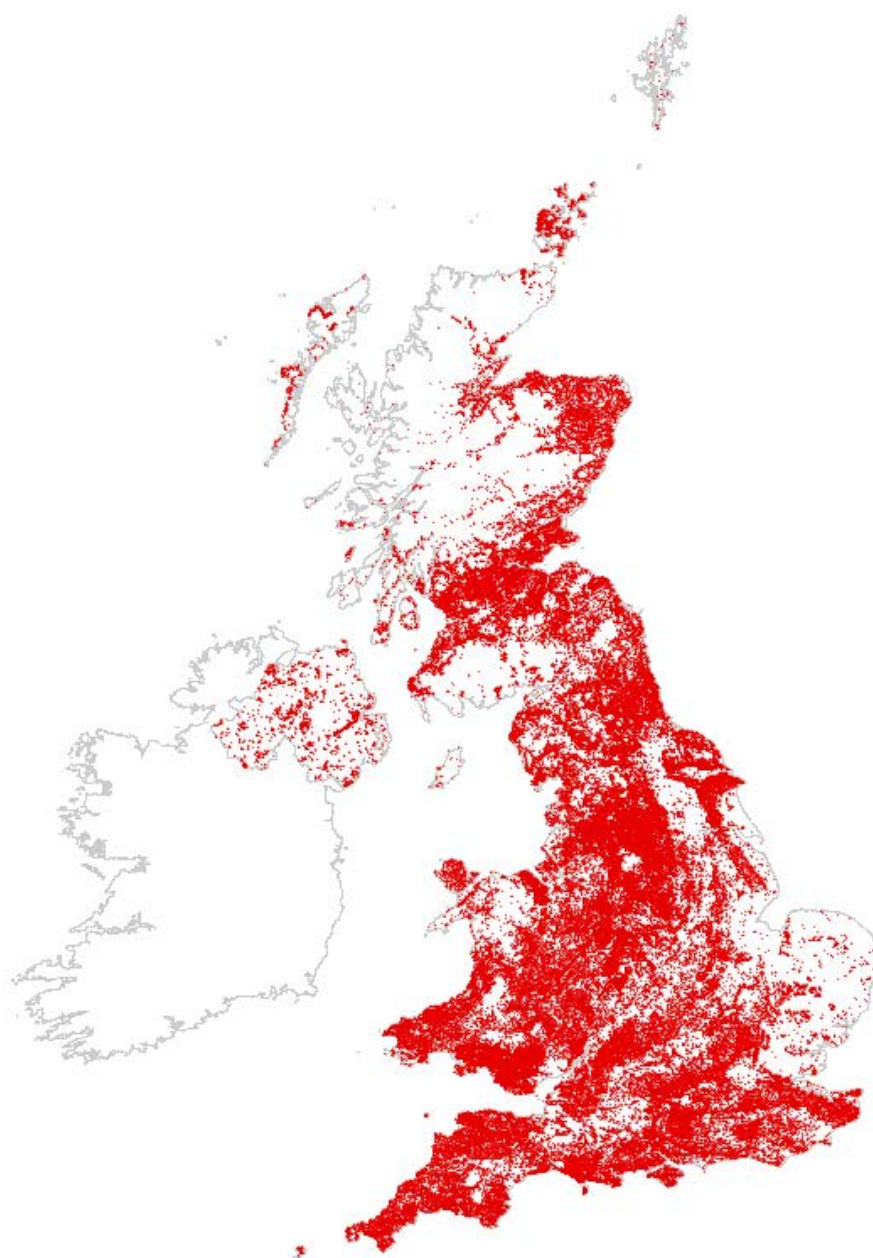


**British  
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

# User Guide for the BRITPITS GIS dataset

Open Report OR/13/016





BRITISH GEOLOGICAL SURVEY

OPEN REPORT OR/13/016

# User Guide for the BRITPITS GIS dataset

D G Cameron

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# 1 Introduction

The BGS BRITPITS database contains records of mineral workings covering the whole of the United Kingdom and Northern Ireland. The coverage includes active, inactive, dormant and ceased sites and also a range of mineral operations, including mines, quarries, onshore oil and gas fields, together with wharfs and rail depots handling mineral products and industrial processes which produce a mineral product. Until 2010 the data coverage of active, inactive and dormant sites was systematically updated yearly on behalf of the Department of Communities and Local Government (DCLG) by surveying local authorities and industry sources. Since then ad hoc enquiries have been made to various Planning Authorities, and the Minerals industry.

Currently (2012) BGS is conducting a systematic survey of former mineral workings using historical Ordnance Survey mapping and BGS field mapping to locate ceased mineral workings.

## 2 Background

The data was originally compiled by BGS and its predecessors by Robert Hunt, Keeper of Mining Records, at the Museum of Practical Geology, as part of the Memoirs of the Geological Survey and Museum of Practical Geology. In Volume 2 Part 2, 1848, of this series, he produced a list of UK lead mines and their production 1845 and 1846. Later, Hunt included a list of collieries in a separate and original Mineral Statistics publication of 1854, and by 1856 he had included a list of building stone quarries as well as collieries and some metalliferous mines. This publication subsequently, on the value of this data to the legislation of mineral operations being recognised, became separate lists of mines and quarries published by the Inspectorate of Mines from 1897. Latterly under the aegis of the Ministry of Fuel and Power (MFP) the last edition was produced in 1948. This was the last comprehensive list, although it was followed by specialist publications such as the 'Sources of Road Aggregate in Great Britain' published by the Department of Scientific and Industrial Research, and 'The Guide to the Coalfields' published by the trade association journal Colliery Guardian, together with the MFP (1948 - 1993). There followed a hiatus until 1984 when BGS staff took the decision to recommence publication of the list of mines and quarries as the Directory of Mines and Quarries and gather the disparate sources of information in one comprehensive publication. Eight editions of the Directory have been produced since then, at three or four year intervals. In 1987, it was decided that the information collected for the publication should be databased and the BRITPITS database was set up to accommodate the active as well as inactive and closed workings listed in the previous Directories. The BRITPITS database was designed to allow production of the Directory as well as holding other unpublished information and the first data loading took place in 2000. The design has since been altered in light of user comments and the need to store extra data not originally envisaged.

Subsequently the information on currently active sites has been updated continually with the cooperation of both local authorities and the minerals industry. Until 2010, an annual survey of Minerals Planning Authorities, on behalf of the Department of Communities and Local Government, Scottish and Welsh Governments, was supplemented with a three yearly survey of the minerals operators.

This information has been used to produce the hard copy editions of the Directory of Mines and Quarries and is subsequently included in the BRITPITS Database.

### 3 What the dataset shows

The dataset described in this user guide is a subset of the full BRITPITS database. The data is divided into three GIS products, each showing different levels of information:

1. **Index data.** An index level dataset showing the location, name and status of every known mine in Great Britain and Northern Ireland
2. **Active, inactive, dormant data.** A point dataset with approximately 3 500 entries, showing all known active, inactive and dormant mines/quarries in Great Britain and Northern Ireland. This subset does not include information on historic sites.
3. **Full dataset.** A detailed point dataset with approximately 170 000 entries showing the location and description of the currently recorded mineral workings in Great Britain and Northern Ireland, The Isle of Man and The Channel Islands. This includes information on historic sites. The data is split into 17 regions (see table below) and for licencing purposes supplied as 15 regions.

REGION	DESCRIPTION
CHA	Channel Island (NB Grid Co-ordinates are UTM)**
EEN	East England
EMD	East Midlands (England)
IOM	Isle Of Man*
LON	Greater London
NEA	North East England
NIR	Northern Ireland
NWE	North West England
NSCT	North Scotland
CSCT	Central Scotland
SSCT	South Scotland
SEA	South East England
SWE	South West England
NWLS	North Wales
SWLS	South Wales
WMD	West Midlands (England)
YHU	Yorkshire and Humberside (England)

\* supplied with Northern Ireland

\*\*supplied with South West England

The full dataset shows the location of active, inactive and ceased mineral workings in Great Britain and Northern Ireland, including details of the local authority, together with the lithologies worked at site and the name of the current or most recent operator where known. Mineral workings include quarries, mines, oil and gas wells and industrial operations producing mineral products such as blast furnace slag or desulphogypsum. The dataset also includes, for convenience and use in central and local government surveys, the locations of mineral handling sites such as wharfs and rail depots handling marine dredged sand and gravels or crushed rock.

The lithological information for surface workings is based on the current version of the BGS Digital Geological Map of Great Britain at 1:50 000 (DiGMapGB-50). Information regarding underground workings is taken from the relevant BGS 1:10 560 and 1:10 000 mapping. Reservoir rocks for oil and gas are identified by BGS scientists.

### 3.1 WHO WOULD BENEFIT FROM THE DATASET?

The data is currently used by Central Government (DCLG) and other bodies such as the Office for National Statistics and the Scottish and Welsh Governments. The data is currently being used by BGS and information disseminated to a variety of end users through BGS' value-added resellers (VARs), as it contains information locating former and existing mineral working localities. It is suitable for a variety of other uses, for example, in the minerals industry or in local government minerals planning who require to produce spatial analyses. It is also of use to environmental agencies and other bodies in the public and private sector who have an interest in the location of mineral extraction sites and their possible afteruse or other issues.

### 3.2 FIELD DESCRIPTIONS

The three BRITPITS GIS datasets contain the following tables. Where a Field Description is given as a 'Code' field, this will be populated from the relevant Dictionary table shown below. Due to limitations with certain enduser applications and software, some field names are truncated in the GIS.

Please contact [digitaldata@bgs.ac.uk](mailto:digitaldata@bgs.ac.uk) if you require additional information.

#### 3.2.1 Index data

Field name	Field description
BGS_REFERE	Identifier of a pit (quarry or other mineral working)
PIT_NAME	The name of the mining or quarrying operation
PIT_STATUS	This field lists the operational status of the site. Code obtained from section 3.2.6 Pit Operational Status Dictionary Table (BGS_DIC_MQ_PIT_STATUS)
EASTING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m For Channel Island records this is projected to UTM zone 30 (north)
NORTHING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m For Channel Island records this is projected to UTM zone 30 (north)
SPONSOR_OR	Sponsor organisation of data collection (where BGS is the British Geological Survey, and EH is English Heritage)

#### 3.2.2 Active, inactive, dormant data

Field name	Field description
BGS_REFERE	Identifier of a pit (quarry or other mineral working)
PIT_NAME	The name of the mining or quarrying operation
ALTERNATIV	Any alternative or subsidiary names applied to the workings or names of pits subsumed into the current working area
PARENT_PIT	Identification number of the main site in the BRITPITS database, if a pit is or has been worked in a complex, or is a satellite site
PIT_STATUS	This field lists the operational status of the site. Code obtained from section 3.2.6 Pit Operational Status Dictionary Table (BGS_DIC_MQ_PIT_STATUS)
TYPE_OF_MI	This field lists the type of mineral working at the site Code obtained from section 3.2.5 Mineral Site Type Dictionary Table (BGS_DIC_MIN_SITE_TYPE)



CMDTY_CODE	Code for the mineral Commodity worked at site, see section 3.2.4 Commodity Dictionary Table (BGS_DIC_COMMODITY)
CMDTY_PROD	Name of the commodity worked at site, obtained from section 3.2.4, Commodity Dictionary Table (BGS_DIC_COMMODITY)
EASTING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m For Channel Island records this is projected to UTM zone 30 (north)
NORTHING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m For Channel Island records this is projected to UTM zone 30 (north)
PIT_ADDRES	Full address for the pit
AGE	Age of period, e.g. 'Carboniferous'
LITHOSTRAT	Body worked at the site. Derived from BGS_LEX_LITHOSTRAT_Vx and LEXICON, see section 3.2.7. Former names are included where this is helpful to the non-technical geological user E.g. White Chalk Subgroup (Upper Chalk). Used in the site description for production of Directory of Mines and Quarries
OPER_NAME	Full name and title of operator, e.g. 'Alexander Russell PLC'; this may be a branch or division of a major group of companies
OPER_ADDRE	Address of operator
DATE_UPDAT	Date of updating any part of the information of the record in the database
EPR_CODE	Economic Planning Region code (see field PLANNING_R for full description)
PLANNING_R	Economic Planning Region of the United Kingdom and Northern Ireland; the Isle of Man and the Channel Islands are included in this table for convenience. See section 3.2.9.
SPONSOR_OR	Sponsor organisation of data collection (where BGS is the British Geological Survey, and EH is English Heritage)
MPA_CODE	Code for the Mineral Planning Authority within which the mineral working is primarily situated; obtained from section 3.2.8, Mineral Planning Authority Dictionary Table (BGS_DIC_MPA)

### 3.2.3 Full dataset

Field name	Field description
BGS_REFERE	Identifier of a pit (quarry or other mineral working)
PIT_NAME	The name of the mining or quarrying operation
ALTERNATIV	Any alternative or subsidiary names applied to the workings or names of pits subsumed into the current working area
PARENT_PIT	Identification number of the main site in the BRITPITS database, if a pit is or has been worked in a complex, or is a satellite site
PIT_STATUS	This field lists the operational status of the site. Code obtained from section 3.2.6 Pit Operational Status Dictionary Table (BGS_DIC_MQ_PIT_STATUS)
TYPE_OF_MI	This field lists the type of mineral working at the site. Code obtained from section 3.2.5 Mineral Site Type Dictionary Table (BGS_DIC_MIN_SITE_TYPE)
CMDTY_CODE	For the Code relating to the commodity worked at site see section 3.2.4 COMMODITY Dictionary Table.
CMDTY_PROD	Code for the mineral Commodity worked at site see section 3.2.4

	Commodity Dictionary Table (BGS_DIC_COMMODITY)
EASTING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m For Channel Island records this is projected to UTM zone 30 (north).
NORTHING	British National Grid coordinates for the Easting of the working void or mine entrance in Metres (6 figure): tolerance of 5m. For Channel Island records this is projected to UTM zone 30 (north)
PIT_ADDRES	Full address for the pit
AGE	Age of period, e.g. 'Carboniferous'
LITHOSTRAT	Body worked at the site. Derived from BGS_LEX_LITHOSTRAT_Vx and LEXICON, see section 3.2.7. Former names are included where this is helpful to the non-technical geological user e.g. White Chalk Subgroup (Upper Chalk). Used in the site description for production of the Directory of Mines and Quarries
OPER_NAME	Full name and title of operator, e.g. 'Alexander Russell PLC'; this may be a branch or division of a major group of companies
OPER_ADDRE	Address of operator
DATE_UPDAT	Date of updating any part of the information of the record in the database
EPR_CODE	Economic Planning Region code (see field PLANNING_R for full description)
PLANNING_R	Economic Planning Region of the United Kingdom and Northern Ireland; the Isle of Man and the Channel Islands are included in this table for convenience. See section 3.2.9.
SPONSOR_OR	Sponsor organisation of data collection (where BGS is the British Geological Survey, and EH is English Heritage)
MPA_CODE	Code for the Mineral Planning Authority within which the mineral working is primarily situated; obtained from section 3.2.8, Mineral Planning Authority Dictionary Table (BGS_DIC_MPA)

### 3.2.4 Commodity Dictionary Table (BGS\_DIC\_COMMODITY)

This table lists the commodities produced by the site, using the name commonly used for reporting the Commodity in the List of Mines and Quarries, Directory of Mines and Quarries and other local or central government planning or statistical registers. A commodity name reflects the final use of the material and may not necessarily match the lithology listed, e.g. 'Silica Rock' will be derived from a sandstone bed, which may also have building stone quarries with 'Sandstone' as the commodity. Historical commodity names such as 'Smudge' or 'Coprolite' are retained, as the site will have been known as a producer of these. For other commodities, e.g. where the commodity is a metallic element or a mineral ore, or predates the reporting of mineral statistics and planning, then that name will be used

CODE	NAME	DESCRIPTION
!	Not Available	Not Available - applicable, but try as we might, we can't find a value
-	Not Applicable	Not applicable
AG	Silver	Silver metal and ores, unspecified
AGA	Agate	Variety of quartz, chalcedony etc, obtained from amygdale in volcanic rock, used as decorative stone or jewellery; includes 'Scotch Pebble'

ALA	Alabaster	Gypsum used as a decorative stone
ALU	Alum	Aluminium sulphate, ammonium sulphate, potassium sulphate mixture; used to fix dyes
AMM	Abandoned Mine Methane	Gas derived from the voids of former coal mine workings, mainly methane
ANT	Anhydrite	Anhydrous calcium sulphate, $\text{CaSO}_4$ ; used as a source of sulphur for the manufacture of ammonium sulphate and sulphuric acid and in Portland Cement manufacture
AS	Arsenic	Arsenic ores, unspecified
AU	Gold	Gold metal and ores, unspecified
BA	Barium	Barium minerals, unspecified
BAL	Ball Clay	Fine grained, highly plastic, sedimentary clays which fire to a light or near white colour
BAR	Barytes	Barium sulphate, $\text{BaSO}_4$
BAS	Basalt	Northern Ireland Commodity Designation - Basalt and igneous rock (excluding granite)
BAU	Bauxite	Aluminium ore, $\text{Al}(\text{OH})_3$
BFS	Blast Furnace Slag	By-product of iron making, resulting from the fusion of fluxing stone (fluorspar) with coke, ash and siliceous and aluminous residues remaining after the reduction and separation of iron from ore; general aggregate and fill uses
BI	Bismuth	Bismuth minerals, unspecified
BLA	Blaes	Burnt shale, usually red coloured and derived from oil shale or coal working tips or bings; used for paths and tracks and sports grounds as 'Red Blaes'
CAL	Calcite	Calcium carbonate, $\text{CaCO}_3$ , in crystalline form, usually associated with metalliferous mineral veins; used as a decorative aggregate
CBM	Coalbed Methane	Methane abstracted from virgin or unworked coal seams using boreholes
CD	Coal, Deep	Coal extracted from underground workings, Deep mines, Levels or Drift mines
CEL	Celestite	Strontium sulphate, $\text{SrSO}_4$ ; source of strontium chemicals for use in pyrotechnics, glass, ceramics and pharmaceuticals
CHA	Chalk	Fine-grained, usually white, sedimentary carbonate rock consisting of calcium carbonate $\text{CaCO}_3$
CHC	China Clay	Kaolin, a clay derived from the alteration products of granite, comprising principally of kaolinite; used in paper making, whiteware, sanitary ware and as fillers etc
CHS	China Stone	Partly altered (kaolinised), felspar-rich granite lacking iron-bearing minerals; crushed and used as a flux in the

		pottery industry
CHT	Chert	Chert or 'Chertstone', $\text{SiO}_2$ , resulting from diagenetic processes in limestones; worked from superficial or bedrock deposits
CHW	China Clay Waste	Washed material produced as a by-product during the extraction of China Clay (kaolin) from kaolinitic granite, predominantly comprising quartz with some mica 'china clay sand'; used as aggregate
CLA	Clay & Shale	Clays and/or shales (mudstones) used in brick, pipe and tile manufacture, cement manufacture, a source of pottery clay and as construction fill
CMM	Mine Drainage Gas	Gas derived from the voids of working coal mines, mainly methane
CO	Coal, Surface Mined	Coal derived from surface extraction or from treatment of old colliery spoil tips, formerly known as 'Opencast Coal'
COA	Coal	Coal, unspecified source
COB	Cobalt	Cobalt ores, unspecified
COL	Colliery Spoil	'Minestone', coal and other materials extracted during coal working and tipped at site; used for secondary aggregates, and/or extraction of coal
COP	Coprolite	Phosphatic nodules; used as phosphate fertiliser.
CR	Chromite	Chromium ores, unspecified
CRA	Crushed Rock	Crushed hard rock, source not known; used as aggregate
CU	Copper	Copper ores, unspecified
DIT	Diatomite	'Diatomaceous Earth' or 'kieselguhr', fine grained siliceous sediment composed of remains of diatoms (microscopic plants) derived from lacustrine deposits; used as fillers, absorbents, abrasives, an insulator and filter medium in the food industry
DOL	Dolomite	'Dolostone', sedimentary carbonate rock composed mainly of the mineral dolomite $\text{CaMg}(\text{CO}_3)_2$ formed by replacement of pre-existing limestone by Mg-rich fluids. 'Dolomite' rock is usually a combination of dolomite, dolomitic limestone and limestone
FBA	Furnace Bottom Ash	The coarser fraction of ash produced in coal burning power stations resulting from the fusion of pulverized-fuel ash particles which fall to the bottom of the furnace, size range - fine sand to coarse gravel; used as lightweight aggregate and fill
FEL	Feldspar	Pegmatitic feldspar is ground for industrial uses, e.g. in glass making and pottery
FEO	Iron ore	Unspecified iron ores
FIR	Fireclay	A non-marine sedimentary mudstone which can occur as 'seat earths' under coal seams consisting of kaolinite with varying proportions of hydrous mica (illite) and quartz

		etc; used for refractory purposes and brick making
FLI	Flint	Siliceous concretions, commonly resulting from diagenetic processes in chalk, also worked in superficial deposits derived from the chalk outcrop; used as decorative building stone, or a component of gravel aggregates
FLU	Fluorspar	Calcium fluoride, $\text{CaF}_2$ , derived from working mineral vein or replacement orebodies in limestones; used as chemical feedstock, a flux in the iron & steel industry and as mineral specimens or decorative stone 'Blue John'
FUL	Fullers Earth	Sedimentary clay containing a high proportion of a Smectite clay mineral, Montmorillonite, with a high cation exchange capacity; originally used for cleaning 'fulling' woollen cloth, now has a wide range of industrial applications
GAN	Ganister	Siliceous sandstones; used in the manufacture of refractory products for high temperature uses
GAS	Natural Gas	Gas abstracted from strata other than Coal measures
GNT	Granite	Northern Ireland Commodity Designation - Granite
GRA	Gravel	'Coarse Aggregate' size range 4 – 80 mm; includes flint, chert, other silicate rock or limestone fragments, derived from river or glacial transport; 'Shingle' in N. Scotland
GRP	Graphite	Native carbon; used as pigment
GST	Gritstone	Northern Ireland Commodity Designation - Hard coarse sandstone, psammite, greywacke or meta-greywacke
GYP	Gypsum	Hydrated calcium sulphate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ formed from the hydration of Anhydrite ( $\text{CaSO}_4$ ); used for the manufacture of plaster, plasterboard and as a component of cement
HON	Honestone	Hard, thermally metamorphosed, fine-grained sedimentary rock; used as abrasive stone for sharpening metal blades
IGN	Igneous & Metamorphic Rock	Commodity term which includes intrusive and extrusive igneous rock and any metamorphic rock; used for construction aggregates, decorative and building stones
IOH	Hematite (Iron Ore)	Hematite ( $\text{Fe}_2\text{O}_3$ ); used for iron making and as a pigment
IOI	Ironstone	Fe-rich limestones; used as a source of iron and as building stone
IOL	Lateritic Iron Ore	Lateritic Iron Ore formed by hydrothermal alteration and chemical weathering of basalt lava of the Palaeogene Antrim Lava Group; used as a source of iron
IOO	Ochre (Iron Ore)	Iron ores, unspecified; used for pigment
JET	Jet	Stone comprising diagenetically silicified araucarian wood occurring as isolated masses in finely laminated shales; decorative and jewellery uses

LFG	Landfill Gas	Gas produced from landfill sites, not a natural product
LIG	Lignite	Brown Coal, coal in an early stage of coalification
LST	Limestone	Sedimentary rock composed principally of calcium carbonate – $\text{CaCO}_3$ ; used for aggregates, decorative and building stone and, if pure, industrial applications
MAB	Marble	Metamorphosed limestone; used for decorative and building stone
MAN	Manganese	Manganese ores, unspecified, 'Wad' if black oxide or hydroxide of manganese
MBL	Mineral Black	Carbonaceous material; used for pigment
MIC	Mica	Mica books or flakes; for industrial use
MIN	Mineral	Unspecified mineral commodity
MSG	Marine Sand & Gravel	Sand and gravel aggregate dredged from the sea floor; size range: 0.063 mm - 80mm
NI	Nickel	Nickel ores, unspecified
OIL	Oil	Crude oil; liquid hydrocarbon; used as a feedstock for energy or industrial uses
PB	Lead	Lead ores, unspecified
PEA	Peat	Decomposed vegetable matter, typically moss; used for fuel or horticulture
PER	Perlite	'Perlite', the industrial name for volcanic glass with sufficient water content to cause it to expand, or froth up, when heated, forming a lightweight granular aggregate; used in construction, insulation, packaging and agriculture
PFA	Pulverised Fuel Ash	By-product of electricity generation; secondary aggregate
POR	Porcellanite	Northern Ireland Commodity Designation - product of the thermal metamorphism of a ferruginous bauxitic clay, derived from Interbasaltic horizons
POT	Potash	Potassium-bearing minerals and products, primarily Sylvite, $\text{KCl}$ ; usually mined as Sylvinite, a mixture with Halite, $\text{NaCl}$
PYR	Iron Pyrites	Iron Pyrites $\text{FeS}_2$ ; used in manufacture of sulphuric acid
QUW	Quarry Waste	Material resulting from quarry processing procedures usually retained on site; used for fill or restoration purposes
S	Sulphur	Sulphur, unspecified source mineral
SAG	Sand & Gravel	Accumulations of more durable rock fragments (silicates, flints, etc) derived from the weathering, erosion and transport of rocks by glacial and fluvial actions, size range: 0.063 mm - 80mm; used for aggregate purposes and construction fill
SAL	Salt	Halite, $\text{NaCl}$ ; either as rock salt from mining operations or precipitated from Brines

SAN	Sand	Fine aggregate; size range: 0.063 mm - 4mm; generally composed of silicate fragments, derived from wind, river or glacial transport
SB	Antimony	Antimony Ores, unspecified
SCH	Schist	Northern Ireland Commodity Designation - Schist, a coarse metamorphosed sandstone, psammite
SEC	Secondary	Unspecified materials which may be used as aggregates, includes recycled aggregates arising from construction and demolition, highway maintainance and rail ballast replacement as well as quarry or industrial by-products, e.g. slags, china clay sand
SEL	Sea Salt	Halite, NaCl, precipitated from seawater
SGST	Sandstone/Gritstone	Northern Ireland Commodity Designation - Sandstone and, or, Gritstone, undifferentiated
SHL	Shale	Northern Ireland Commodity Designation - Shale, fine-grained sedimentary rocks: used for construction fill
SLA	Slag	By-products of the manufacture of steel from pig iron, includes basic oxygen furnace slag (BOF) and electric arc furnace (EAF) slag; aggregate uses, e.g. rail ballast
SLT	Slate	Fine-grained metamorphic rocks with well developed cleavage; used for roofing, flooring, general building stone and aggregate
SLW	Slate Waste	Waste material from slate processing, usually in tips as a secondary aggregate: used as construction fill or decorative stone
SMU	Smudge	A pasty form of decomposed coal; used as a black pigment
SN	Tin	Tin ore, mainly cassiterite
SOI	Soil	Soil or Topsoil removed from mineral working or construction project as a by-product
SOP	Soapstone	Soapstone or 'Steatite', an altered igneous rock; used as decorative stone
SPT	Serpentine	'Serpentinite', hydrothermally metamorphosed ultrabasic igneous rock composed of mineral Serpentine; used as decorative stone
SSA	Silica Sand	Sand, or loosely cemented sandstone, with a high silica content (>95% SiO <sub>2</sub> ) and low amounts of impurities; used in glassmaking and other industrial processes, horticulture and foundry uses
SSR	Silica Rock	Sandstone or quartzite with a high silica content; used in industrial processes
SST	Sandstone	Sedimentary rock mainly composed of quartz particles; includes sandstones, quartzites, gritstones and conglomerates; aggregates and building stone

STR	Strontianite	Strontium carbonate, $\text{SrCO}_3$ , source of strontium chemicals; used in pyrotechnics, glass, ceramics and pharmaceuticals
TAL	Talc	Soft metamorphic rock composed mainly of $\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$ ; used for powders and fillers
TIL	Tilestone	Tilestone, sandstone or limestone, unspecified; roofing stone
TUF	Tufa	Sedimentary carbonate rock formed by precipitation of calcium carbonate $\text{CaCO}_3$ , from streams; used for decorative and building stone
U	Uranium	Uranium minerals, unspecified
UMB	Umber	Manganese oxide ores used for pigment, also known as 'wad'
VMI	Vein Minerals	Unspecified vein minerals
W	Tungsten	Tungsten, also known as Wolfram, ores, primarily Wolframite
WIT	Witherite	Witherite, barium carbonate, $\text{BaCO}_3$ ; industrial uses
ZN	Zinc	Zinc ores, unspecified
SYG	Synthetic gypsum	Calcium sulphate produced as a byproduct of flue gas desulphurisation (FGD) using limestone or Titanogypsum, produced by neutralising acid effluent of titanium dioxide of titanium dioxide processing with chalk
DES	Desulphogypsum	Calcium sulphate produced as a byproduct of flue gas desulphurisation (FGD) using limestone
TIG	Titanogypsum	Calcium sulphate produced by neutralising acid effluent of titanium dioxide processing with chalk

### 3.2.5 Mineral Site Type Dictionary Table (BGS\_DIC\_MIN\_SITE\_TYPE)

This table lists the various types of site involved in mineral production and handling

CODE	TRANSLATION	DESCRIPTION
!	Not Available	Not Available - Applicable but try as we might, we can't find a value
-	Not Applicable	Not Applicable
?	Not Entered	Not Entered - We haven't assigned a value yet
A	Recycling Depot	Site producing recycled material, construction and demolition materials recovered for use as secondary aggregates
C	Copper precipitation pit	Wooden troughs in which scrap iron was placed in order to precipitate copper metal from mine drainage water
L	Liquid or gas	Wellsite, or other surface plant, extracting liquid or gas.



	extraction	Working may be for brine, oil or natural gas
O	Open-pit or surface workings	A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping
OU	Open-pit and underground	The mineral working is partly on the surface and partly underground, working the same bodies for the same commodities
P	Power Station	Power station which produces Desulphogypsum and, or, Pulverised Fuel Ash or Furnace Bottom Ash
R	Rail depot	A site where mineral commodities are loaded to, or unloaded from, rail trucks and stored
S	Steel Works	Steel works which produce Slags as a by-product of blast furnace steel smelting
T	Tip	Tip for waste, or unused commodity, at a mine, quarry or other location from which mineral is being extracted. Working may be termed Tip, Spoil Heap, Slate Waste Tip, Bing, Shale Bing, Coal Tip or Coal Bing, or may be mapped as Made Ground on BGS maps
U	Underground workings	Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be termed 'Quarry' or 'Underground Quarry' when referring to sites extracting building stone (Dorset, Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document
W	Wharf	Sea, river or canal wharf where mineral commodities are unloaded and stored

### 3.2.6 Pit Operational Status Dictionary Table (BGS\_DIC\_MQ\_PIT\_STATUS)

This table lists the operational status of the site.

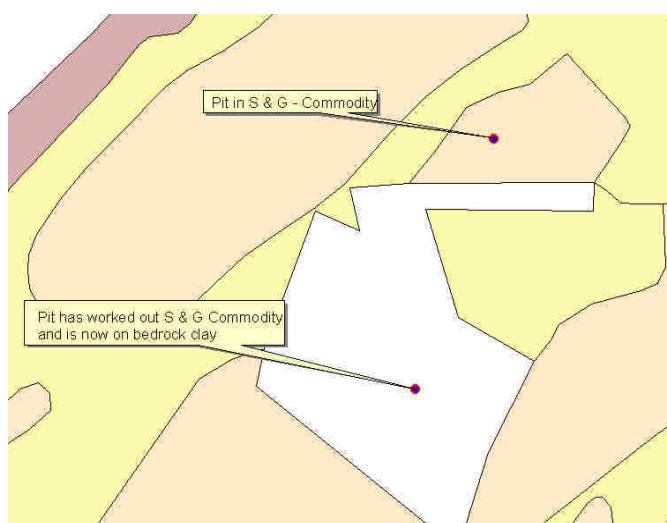
CODE	TRANSLATION	DESCRIPTION
?	Not Entered	Not Entered. We have not assigned a value yet (and it might not be applicable) (BGS Standard database code)
A	Active	Site which is actively extracting mineral products, or in the case of wharfs and rail depots, is actively handing minerals
C	Ceased	Site which, at date of entry, has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority

D	Dormant	Site which, at the date of entry, is defined under the Environment Act 1995 as a mineral site where no mineral development has taken place to any substantial extent in, on, or under the site at any time in the period 22nd February 1982 and 6 June 1995
H	Historic	Historic mineral workings, usually historic building stone sites, where not currently active and the location is not known for certain. These sites usually predate the Ordnance Survey mapping.
I	Inactive	Site which, at date of entry, is not extracting minerals, but which still has a valid planning permission to do so, and can restart at any time. May be considered 'Mothballed' by operator. May be considered to have 'Active' or 'Dormant' planning permission by the Mineral Planning Authority
S	Special	Sites which are used for other purposes than extraction, but which are still covered by the Mines and Quarries Acts, e.g. tourist mines
T	Tipping	Landfill taking place in void created by mineral extraction. May be considered to have 'Active' planning permissions by Mineral Planning Authority
Y	Yet to Begin	Sites which have been notified by operators or Mineral Planners but have not started extracting mineral at date of entry. Will be considered to have 'Active' planning permissions by Mineral Planning Authority

### 3.2.7 Lexicon Dictionary Table (BGS Lexicon of Named Rock Units)

The lithostratigraphy of the worked bodies is derived primarily from the BGS digital mapping DiGMapGB-50. The defined name of the body and full description are derived from the BGS Lexicon of Named Rock Units, the latter may be accessed here:

<http://www.bgs.ac.uk/lexicon/home.html>



**Figure 1** Two Sand & Gravel workings, both listed with the same lithostratigraphical body, although this is missing in one case, due to remapping taking place after extraction.

Note that the Lithostratigraphy stated may differ from that shown on DiGMapGB-50 at a particular site's grid reference for a number of reasons. Most usually, the geology map have been remapped and re-interpreted since the record was created. Using DiGMapGB-50 dataset has led to misidentification of sites due to the simplification of the geological shapes at 1:50 000 scale. For example, small exposures which are shown on 1:10 000 or 1:10 560 geological maps as 'sandstone' in small quarry workings through a cap of clay are too small to be visible at 1:50 000 scale so do not appear on the digital data. The automatic collection will therefore appear to be a clay site instead of a sandstone site. Simplification of geological boundaries to match OS linework may also result in an

incorrect lithology being automatically assigned to a centroid.

In addition to the point above, it is also common for the material to have been worked away. If the site is remapped, and the geology revised, a ‘doughnut’ of the commodity material is left around a base of a different body. This scenario is commonly found in Sand & Gravel workings where the material is extracted down to the underlying clay.

### 3.2.8 Mineral Planning Authority Dictionary Table (BGS\_DIC\_MPA)

This table lists the current Mineral Planning Authority (MPA) that the site is mainly worked in, together with the code for the immediately previous Authority that it may have been listed under, together with the code for the relevant Economic Planning Region (EPR). Section 3.2.9 contains information on Economic Planning Regions. Other unitary authorities in Northern Ireland, together with countries and their Governments are also included in this table for completeness as the latter are considered to be Minerals Planning Authorities.

MPA_CODE	MPA_NAME	COUNTR Y_CODE	FORMER _COUNT Y_CODE	EPR_CO DE
ABD	Aberdeenshire Council	SCT	GMP	SCT
ABE	Aberdeen City Council	SCT	GMP	SCT
AGB	Argyll and Bute Council	SCT	STD	SCT
AGY	Isle of Anglesey County Council, Cyngor Sir Ynys Mon	WLS	GWN	WLS
ANS	Angus Council	SCT	TAY	SCT
ANT	Antrim County	NIR		NIR
ANT2	Antrim Borough Council	NIR	ANT	NIR
ARD	Ards Borough Council	NIR	DOW	NIR
ARM	Armagh County	NIR		NIR
ARM2	Armagh City and District Council	NIR	ARM	NIR
BAS	Bath and North East Somerset Council	ENG	AVN	SWE
BBD	Blackburn with Darwen Borough Council	ENG	LAN	NWE
BDF	Bedfordshire County Council	ENG	BDF	EEN
BDF2	Bedford Borough Council	ENG	BDF	EEN
BDF3	Central Bedfordshire Council	ENG	BDF	EEN
BDG	London Borough of Barking and Dagenham Council	ENG	GTL	LON
BEN	London Borough of Brent Council	ENG	GTL	LON
BEX	London Borough of Bexley	ENG	GTL	LON
BFS	Belfast County Borough	NIR		NIR
BGE	Bridgend County Borough Council, Cyngor Bwrdeistref Sirol Pen-y-bont ar Ogwr	WLS	MGM	WLS
BGW	Blaenau Gwent County Borough Council, Cyngor Bwrdeisdref Sirol Blaenau Gwent	WLS	GNT	WLS
BIR	Birmingham City Council	ENG	WMD	WMD
BKM	Buckinghamshire County Council	ENG	BKM	SEA
BLA	Ballymena Borough Council	NIR	ANT	NIR
BLY	Ballymoney Borough Council	NIR	ANT	NIR
BMH	Bournemouth Borough Council	ENG	DOR	SWE
BNB	Banbridge District Council	NIR	DOW	NIR
BNE	London Borough of Barnet Council	ENG	GTL	LON
BNH	Brighton & Hove City Council	ENG	WSX	SEA

BNP	Brecon Beacons National Park Authority, Awdurdod Parc Cenedlaethol Bannau Brycheiniog	WLS	BNP	WLS
BNS	Barnsley Metropolitan Borough Council	ENG	SYK	YHU
BOL	Bolton Council	ENG	GTM	NWE
BPL	Blackpool Council	ENG	LAN	NWE
BRC	Bracknell Forest District Council	ENG	BRK	SEA
BRD	Bradford Metropolitan District Council	ENG	WYK	YHU
BRK	Berkshire County Council	ENG	BRK	SEA
BRY	London Borough of Bromley	ENG	GTL	LON
BST	Bristol City Council	ENG	AVN	SWE
BUR	Bury Council	ENG	GTM	NWE
CAM	Cambridgeshire County Council	ENG	CAM	EEN
CAY	Caerphilly County Borough Council, Cyngor Bwrdeistref Sirol Caerffili	WLS		WLS
CGNE	Ceredigion County Council, Sir Ceredigion	WLS	DFD	WLS
CGV	Craigavon Borough Council	NIR		NIR
CHS	Cheshire County Council	ENG	CHS	NWE
CHSE	Cheshire East Council	ENG	CHS	NWE
CHSW	Cheshire West and Chester Council	ENG	CHS	NWE
CKF	Carrickfergus Borough Council	NIR	ANT	NIR
CKT	Cookstown District Council	NIR	TYR	NIR
CLD	Calderdale Council	ENG	WYK	YHU
CLK	Clackmannanshire Council	SCT	CEN	SCT
CLR	Coleraine Borough Council	NIR	LDY	NIR
CMA	Cumbria County Council	ENG	CMA	NWE
CMD	London Borough of Camden Council	ENG	GTL	LON
CMN	Carmarthenshire County Council, Cyngor Sir Gar (Sir Gaerfyrddin)	WLS	DFD	WLS
CON	Cornwall Council	ENG	CON	SWE
COV	Coventry City Council	ENG	WMD	WMD
CRF	Cardiff Council, Cyngor Caerdydd	WLS	SGM	WLS
CRY	London Borough of Croydon	ENG	GTL	LON
CSR	Castlereagh Borough Council	NIR		NIR
CWY	Conwy County Borough Council, Cyngor Bwrseidref Sirol Conwy	WLS	GWN	WLS
DAL	Darlington Borough Council	ENG	DUR	NEA
DBY	Derbyshire County Council	ENG	DBY	EMD
DEN	Denbighshire County Council, Cygnor Sir Ddinbych	WLS	CWD	WLS
DER	Derby City Council	ENG	DBY	EMD
DEV	Devon County Council	ENG	DEV	SWE
DGN	Dungannon and South Tyrone Borough Council	NIR	TYR	NIR
DGY	Dumfries and Galloway Council	SCT	DGY	SCT
DNC	Doncaster Council	ENG	SYK	YHU
DND	Dundee City Council	SCT	TAY	SCT
DNP	Dartmoor National Park Authority	ENG	DEV	SWE
DOR	Dorset County Council	ENG	DOR	SWE
DOW	Down County	NIR		NIR
DOW2	Down District Council	NIR	DOW	NIR

DRY	Londonderry County	NIR	LDY	NIR
DRY2	Londonderry County Borough	NIR	DRY	NIR
DUD	Dudley Metropolitan Borough Council	ENG	WMD	WMD
DUR	Durham County Council	ENG	DUR	NEA
EAL	London Borough of Ealing Council	ENG	GTL	LON
EAY	East Ayrshire Council	SCT	STD	SCT
EDH	City of Edinburgh Council	SCT	LTN	SCT
EDU	East Dunbartonshire Council	SCT	STD	SCT
ELN	East Lothian Council	SCT	LTN	SCT
ENF	London Borough of Enfield	ENG	GTL	LON
ENP	Exmoor National Park	ENG	SOM	SWE
ERW	East Renfrewshire Council	SCT	STD	SCT
ERY	East Riding of Yorkshire Council	ENG	HUM	YHU
ESS	Essex County Council	ENG	ESS	EEN
ESX	East Sussex County Council	ENG	SSX	SEA
FAL	Falkirk Council	SCT	CEN	SCT
FER	Fermanagh County	NIR		NIR
FER2	Fermanagh District Council	NIR	FER	NIR
FIF	Fife Council	SCT	FIF	SCT
FLN	Flintshire County Council, Sir y Fflint	WLS	CWD	WLS
GAT	Gateshead Metropolitan Borough Council	ENG	TWR	NEA
GLG	Glasgow City Council	SCT	STD	SCT
GLS	Gloucestershire County Council	ENG	GLS	SWE
GRE	London Borough of Greenwich	ENG	GTL	LON
GSY	States of Guernsey	CHA	GSY	CHA
GWN	Gwynedd Council, Cyngor Gwynedd	WLS	GWN	WLS
HAL	Halton Borough Council	ENG	CHS	NWE
HAM	Hampshire County Council	ENG	HAM	SEA
HAV	London Borough of Havering Council	ENG	GTL	LON
HCK	London Borough of Hackney	ENG	GTL	LON
HEF	Herefordshire Council	ENG	HWR	WMD
HIL	London Borough of Hillingdon Council	ENG	GTL	LON
HLD	Highland Council	SCT	HLD	SCT
HMF	London Borough of Hammersmith & Fulham Council	ENG	GTL	LON
HNS	London Borough of Hounslow Council	ENG	GTL	LON
HPL	Hartlepool Borough Council	ENG	CLV	NEA
HRT	Hertfordshire County Council	ENG	HRT	EEN
HRW	London Borough of Harrow	ENG	GTL	LON
HRY	London Borough of Haringey	ENG	GTL	LON
IOS	Council of the Isles of Scilly	ENG	CON	SWE
IOW	Isle of Wight Council	ENG	HAM	SEA
ISL	London Borough of Islington	ENG	GTL	LON
IVC	Inverclyde Council	SCT	STD	SCT
JSY	States of Jersey	CHA	JSY	CHA
KEC	London Borough of Kensington and Chelsea	ENG	GTL	LON
KEN	Kent County Council	ENG	KEN	SEA
KHL	Hull City Council	ENG	HUM	YHU
KIR	Kirklees Council	ENG	WYK	YHU
KTT	Royal Borough of Kingston	ENG	GTL	LON

KWL	Knowsley Metropolitan Borough Council	ENG	MSY	NWE
LAN	Lancashire County Council	ENG	LAN	NWE
LBH	London Borough of Lambeth	ENG	GTL	LON
LCE	Leicester City Council	ENG	LEC	EMD
LDP	Lake District National Park Authority	ENG	CMA	NWE
LDS	Leeds City Council	ENG	WYK	YHU
LEC	Leicestershire County Council	ENG	LEC	EMD
LET	Leitrim County Council	IRL		
LEW	London Borough of Lewisham	ENG	GTL	LON
LIN	Lincolnshire County Council	ENG	LIN	EMD
LIV	Liverpool City Council	ENG	MSY	NWE
LLP	Loch Lomond & The Trossachs National Park Authority	SCT	LLP	SCT
LMV	Limavady Borough Council	NIR		NIR
LND	City of London	ENG	GTL	LON
LRN	Larne Borough Council	NIR	ANT	NIR
LSB	Lisburn City Council	NIR		NIR
LUT	Luton Borough Council	ENG	BDF	EEN
MAN	Manchester City Council	ENG	GTM	NWE
MDB	Middlesbrough Council	ENG	CLV	NEA
MDW	Medway Council	ENG	KEN	SEA
MFT	Magherafelt District Council	NIR	LDY	NIR
MIK	Milton Keynes Council	ENG	BKM	SEA
MLN	Midlothian Council	SCT	LTN	SCT
MON	Monmouthshire County Council, Cyngor Sir Fynwy	WLS	GNT	WLS
MRT	London Borough of Merton Council	ENG	GTL	LON
MRY	Moray Council	SCT	GMP	SCT
MTY	Merthyr Tydfil County Borough Council, Cyngor Bwrdeistref Sirol Merthyr Tudful	WLS	MGM	WLS
MYL	Moyle District Council	NIR		NIR
NAY	North Ayrshire Council	SCT	STD	SCT
NBL	Northumberland County Council	ENG	NBL	NEA
NBP	The Broads Authority	ENG	NFK	EEN
NDN	North Down Borough Council	NIR	DOW	NIR
NEL	North East Lincolnshire Council	ENG	HUM	YHU
NET	Newcastle City Council	ENG	TWR	NEA
NFK	Norfolk County Council	ENG	NFK	EEN
NFP	New Forest National Park Authority	ENG	HAM	SEA
NGM	Nottingham City Council	ENG	NTT	EMD
NLK	North Lanarkshire Council	SCT	STD	SCT
NLN	North Lincolnshire Council	ENG	HUM	YHU
NNP	Northumberland National Park Authority	ENG	NBL	NEA
NSM	North Somerset Council	ENG	AVN	SWE
NTA	Newtownabbey Borough Council	NIR		NIR
NTH	Northamptonshire County Council	ENG	NTH	EMD
NTL	Neath Port Talbot County Borough Council, Cyngor Bwrdeistref Sirol Castell-nedd Port Talbot	WLS	WGM	WLS
NTT	Nottinghamshire County Council	ENG	NTT	EMD
NTY	North Tyneside Council	ENG	TWR	NEA

NWM	London Borough of Newham Council	ENG	GTL	LON
NWP	Newport City Council, Cyngor Dinas Casnewydd	WLS	GNT	WLS
NYK	North Yorkshire County Council	ENG	NRY	YHU
NYM	Newry and Mourne District Council	NIR	DOW	NIR
NYP	North York Moors National Park Authority	ENG	NYK	YHU
OLD	Oldham Council	ENG	GTM	NWE
OMH	Omagh District Council	NIR	TYR	NIR
ORK	Orkney Islands Council	SCT	ORK	SCT
OXF	Oxfordshire County Council	ENG	OXF	SEA
PCP	Pembrokeshire Coast National Park Authority, Awdurdod Parc Cenedlaethol Arfordir Penfro	WLS	DFD	WLS
PDP	Peak District National Park Authority	ENG	PDP	EMD
PEM	Pembrokeshire County Council, Cyngor Sir Penfro (Sir Benfro)	WLS	DFD	WLS
PKN	Perth and Kinross District Council	SCT	TAY	SCT
PLY	Plymouth City Council	ENG	DEV	SWE
POL	Borough of Poole Council	ENG	DOR	SWE
POR	Portsmouth City Council	ENG	HAM	SEA
POW	Powys County Council, Cyngor Sir Powys	WLS	POW	WLS
PTE	Peterborough City Council	ENG	CAM	EEN
RCC	Redcar and Cleveland Borough Council	ENG	CLV	NEA
RCH	Rochdale Metropolitan Borough Council	ENG	GTM	NWE
RCT	Rhondda Cynon Taf County Borough Council, Cyngor Bwrdeistref Sirol Rhondda Cynon Taf	WLS	MGM	WLS
RDB	London Borough of Redbridge Council	ENG	GTL	LON
RDG	Reading Borough Council	ENG	BRK	SEA
RFW	Renfrewshire Council	SCT	STD	SCT
RIC	London Borough of Richmond	ENG	GTL	LON
ROT	Rotherham Metropolitan Borough Council	ENG	SYK	YHU
RUT	Rutland County Council	ENG	LEC	EMD
SAR	Chief Pleas of the Government of Sark	CHA	SAR	CHA
SAW	Sandwell Council	ENG	WMD	WMD
SAY	South Ayrshire Council	SCT	STD	SCT
SCB	Scottish Borders Council	SCT	BOR	SCT
SDP	South Downs National Park	ENG	SDP	SEA
SET	Shetland Islands Council, Zetland	SCT	SET	SCT
SFK	Suffolk County Council	ENG	SFK	EEN
SFT	Sefton Council	ENG	MSY	NWE
SGC	South Gloucestershire Council	ENG	AVN	SWE
SHF	Sheffield City Council	ENG	SYK	YHU
SHN	St. Helens Council	ENG	MSY	NWE
SHR	Shropshire Council	ENG	SHR	WMD
SKP	Stockport Metropolitan Borough Council	ENG	GTM	NWE
SLF	Salford City Council	ENG	GTM	NWE
SLG	Slough Borough Council	ENG	BKM	SEA
SLK	South Lanarkshire Council	SCT	STD	SCT
SND	Sunderland City Council	ENG	TWR	NEA
SNP	Snowdonia National Park Authority,	WLS	GWN	WLS

	Awdurdod Parc Cenedlaethol Eryri			
SOL	Solihull Metropolitan Borough Council	ENG	WMD	WMD
SOM	Somerset County Council	ENG	SOM	SWE
SOS	Southend-on-Sea Borough Council	ENG	ESS	EEN
SRY	Surrey County Council	ENG	SRY	SEA
STB	Strabane District Council	NIR	TYR	NIR
STE	Stoke-on-Trent City Council	ENG	STS	WMD
STG	Stirling Council	SCT	CEN	SCT
STH	Southampton City Council	ENG	HAM	SEA
STN	London Borough of Sutton	ENG	GTL	LON
STS	Staffordshire County Council	ENG	STS	WMD
STT	Stockton-on-Tees Borough Council	ENG	CLV	NEA
STY	South Tyneside Metropolitan Borough Council	ENG	TWR	NEA
SWA	City and County of Swansea, Dinas a Sir Abertawe	WLS	WGM	WLS
SWD	Swindon Borough Council	ENG	WIL	SWE
SWK	London Borough of Southwark	ENG	GTL	LON
TAM	Tameside Metropolitan Borough Council	ENG	GTM	NWE
TFW	Telford and Wrekin Council	ENG	SHR	WMD
THR	Thurrock Borough Council	ENG	ESS	EEN
TOB	Torbay Council	ENG	DEV	SWE
TOR	Torfaen County Borough Council, Cyngor Bwrdeistref Sirol Torfaen	WLS	GNT	WLS
TRF	Trafford Council	ENG	GTM	NWE
TWH	London Borough of Tower Hamlets Council	ENG	GTL	LON
TYR	Tyrone County	NIR		NIR
VGL	Vale of Glamorgan Council, Gyngor Bro Morgannwg	WLS	SGM	WLS
WAR	Warwickshire County Council	ENG	WAR	WMD
WBK	West Berkshire Council	ENG	BRK	SEA
WDU	West Dunbartonshire Council	SCT	STD	SCT
WFT	London Borough of Waltham Forest	ENG	GTL	LON
WGN	Wigan Council	ENG	GTM	NWE
WIL	Wiltshire County Council	ENG	WIL	SWE
WIS	Comhairle nan Eilean Siar	SCT	HLD	SCT
WKF	Wakefield Council	ENG	WYK	YHU
WLL	Walsall Council	ENG	WMD	WMD
WLN	West Lothian Council	SCT	LTN	SCT
WLV	Wolverhampton City Council	ENG	WMD	WMD
WND	London Borough of Wandsworth Council	ENG	GTL	LON
WNM	Royal Borough of Windsor and Maidenhead	ENG	BRK	SEA
WOK	Wokingham Borough Council	ENG	BRK	SEA
WOR	Worcestershire County Council	ENG	HWR	WMD
WRL	Wirral Borough Council	ENG	MSY	NWE
WRT	Warrington Borough Council	ENG	CHS	NWE
WRX	Wrexham County Borough Council, Cyngor Bwrdeistref Sirol Wrecsam	WLS	CWD	WLS
WSM	The Borough of City of Westminster	ENG	GTL	LON



WSX	West Sussex County Council	ENG	SSX	SEA
XXX	To be updated			
YDP	Yorkshire Dales National Park Authority	ENG	YDP	YHU
YOR	City of York Council	ENG	NYK	YHU
CHA	Channel Islands	CHA	CHA	CHA
ENG	England	ENG		
EAW	England and Wales			
GBI	Great Britain and Ireland			
GBN	Great Britain			
GBNI	Great Britain and Northern Ireland (see United Kingdom)			
IOM	Isle of Man Government	IOM	IOM	IOM
NIR	Northern Ireland Executive	NIR		NIR
SCT	Scotland, The Scottish Government, Riaghaltas na h-Alba	SCT		SCT
WLS	Wales, Cymru: Welsh Government, Llywodraeth Cymru	WLS		WLS
UKM	United Kingdom Government			
IRL	Ireland			

### 3.2.9 Economic Planning Region Dictionary Table (DIC\_EPR)

This table lists the current Economic Planning Region (EPR) of the United Kingdom and Northern Ireland in which the site is mainly situated. The Isle of Man and the Channel Islands are included in this table for convenience.

EPR_CODE	EPR_NAME
CHA	Channel Islands
EEN	East of England
EMD	East Midlands
IOM	Isle of Man
LON	Greater London
NEA	North East
NIR	Northern Ireland
NWE	North West
SCT	Scotland
SEA	South East
SWE	South West
WLS	Wales
WMD	West Midlands
YHU	Yorkshire & the Humber

## 4 Coverage

The database covers Great Britain and Northern Ireland, the Isle of Man and the Channel Islands. BGS is continually adding to, updating and correcting the database to constantly improve the accuracy and quality of the information provided.

## 5 Technical information

The data is typically supplied as either GIS point data (e.g. Shapefile) or as a table (e.g. Excel). The data is supplied with British National Grid Coordinates for UK and Isle of Man sites and Irish National Grid Coordinates for Northern Ireland sites. Channel Island sites are recorded in UTM zone 30 (North).

## 6 Data history

As the database is constantly being updated and also has information on the current operational status of mineral sites, it is not considered to have versions.

## 7 Limitations

- Channel Island and Irish Grid sites, may not plot on a customer's British National Grid GIS without manipulation of the appropriate Grid References.
- Data searches may throw up duplicates of sites as the linkages of Commodities and End Uses to Site Location is done on a 1 - 1 basis at present. This is a known issue and will be systematically addressed at the database is updated.
- Parent Pits and subsidiaries are not well linked. New data sites have been entered using automatic surveys which may not have been obviously associated with larger sites. This being amended where noted. However, it should be noted that each point has a mineral extraction site representing a mineral working void or wharf site, etc. This may represent historic progression of the working and be related to the age of the mapping used as a source.
- Use of BGS' Digital Geological Map at 1:50 000: DiGMapGB-50 dataset can lead to misidentification of sites as the mineral worked may not have been shown on the geological map base if remapping has occurred since the site started working. For example, this is a can occur in large recent sand and gravel workings where mapping only shows the remnant worked deposit around the edge of the working, with the underlying non economic material in the centre – 'doughnutting'. The centroid generated by automatic data collection will then record that material as the lithology worked, rather than the actual superficial deposit which was worked away.
- Using DiGMapGB-50 dataset has led to misidentification of sites due to the simplification of the geological shapes at 1:50 000 scale. For example, small exposures which are shown on 1:10 000 or 1:10 560 geological maps as 'sandstone' in small quarry workings through a cap of clay are too small to be visible at 1:50 000 scale so do not appear on the digital data. The automatic collection will therefore appear to be a clay site instead of a sandstone site. Simplification of geological boundaries may also result in the centroid falling on an incorrect lithology if generated by automatic means.

QA procedures are in place to eliminate these problems, however, the large amount of data generated by the automatic surveying will mean that some erroneous data will inevitably slip through. The fact of there being a mineral working site at the point may be of more importance to the customer than the commodity or lithology worked, and that is correctly located by the automatic survey tool.

## 8 Recommended wording for use in site environmental reports

It is recommended that the following text be used in environmental reports in response to spatial searches against the data.

The study site *has/has not* been identified as lying in proximity\* to Current or Historical Mineral Workings, such as mines, quarries, oil and gas wells and mineral handling wharves and depots. The data set stores information on the current operational status of the workings (e.g. Active, Inactive, Dormant, Ceased etc), the Operator and their address details (where known), the Location (as an address and as National Grid Easting and Northing), Commodity worked, Lithology worked, and, if known, the end-use of the material extracted from the workings. Mining and quarrying operations may create noise, dust and traffic issues.

These data are point source only and contain no information as to the size of the minerals workings or operations. As far as possible, in the case of quarries, the point source represents the centre of the working void, but for other types of workings it may be the general centre of any surface activity. Thus the grid reference given for an underground mine does NOT represent any specific shaft locations.

\*A 50m search buffer should be used against this data in addition to any site polygon or search radius

## 9 Contact information

For all data and licensing enquiries please contact:

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