# **Geology 1:50,000 Maps Legends**

# **Superficial Geology**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	HEAD	Head	Clay, Silt, Sand and Gravel	Quaternary - Quaternary
	MBD	Marine Beach Deposits	Sand	Quaternary - Quaternary

#### **Bedrock and Faults**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	PO	Porthkerry Member	Limestone and Mudstone, Interbedded	Sinemurian - Hettangian
		Faults		



#### Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

# Geology 1:50,000 Maps Coverage

 Map ID:
 1

 Map Sheet No:
 262

 Map Name:
 Bridgend

 Map Date:
 1990

 Bedrock Geology:
 Available

 Superficial Geology:
 Available

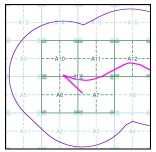
 Artificial Geology:
 Available

 Faults:
 Not Supplied

 Landslip:
 Available

 Rock Segments:
 Not Supplied

## Geology 1:50,000 Maps - Slice A





#### **Order Details:**

 Order Number:
 91812710\_1\_1

 Customer Reference:
 60509148

 National Grid Reference:
 298450, 169060

 Slice:
 A

 Site Area (Ha):
 3.32

 Search Buffer (m):
 1000

arch Buffer (m):

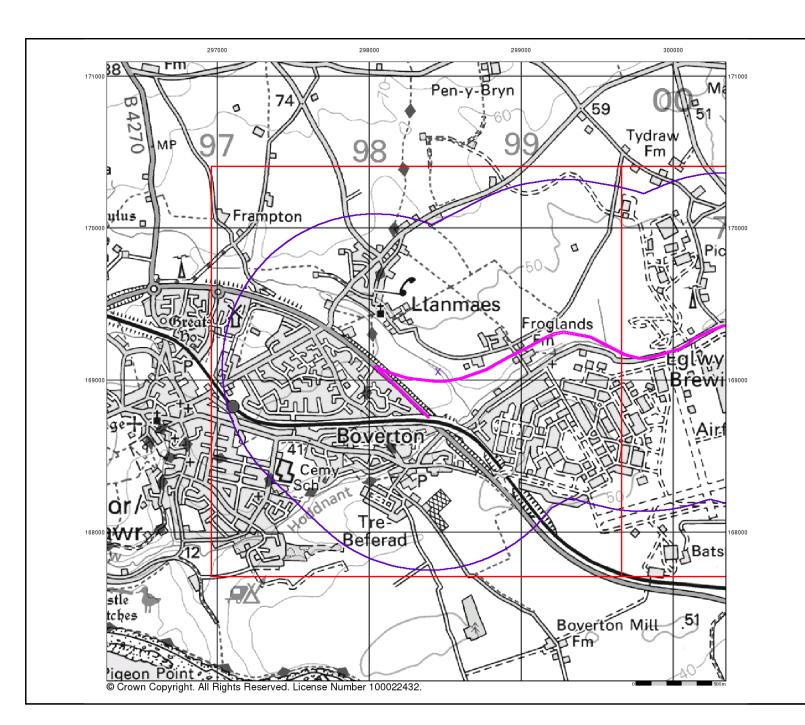
#### Site Details:

St Athan Route, Cowbridge, South Glamorgan, CF71 7EQ



Fel: 0844 844 9952 Fax: 0844 844 9951 Web: www.envirocheck.o

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#### **Artificial Ground and Landslip**

Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

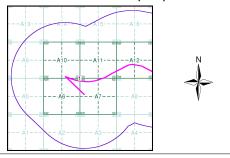
Artificial ground includes:

- Made ground man-made deposits such as embankments and spoil heaps on the natural ground surface.

  - Worked ground - areas where the ground has been cut away such as
- quarries and road cuttings.
- Infilled ground areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground areas where the surface has been reshaped.
   Disturbed ground areas of ill-defined shallow or near surface mineral
- workings where it is impracticable to map made and worked ground

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



# **Order Details:**

Order Number: Customer Reference: 91812710\_1\_1 60509148 298450, 169060 National Grid Reference: A 3.32

Site Area (Ha): Search Buffer (m): 1000

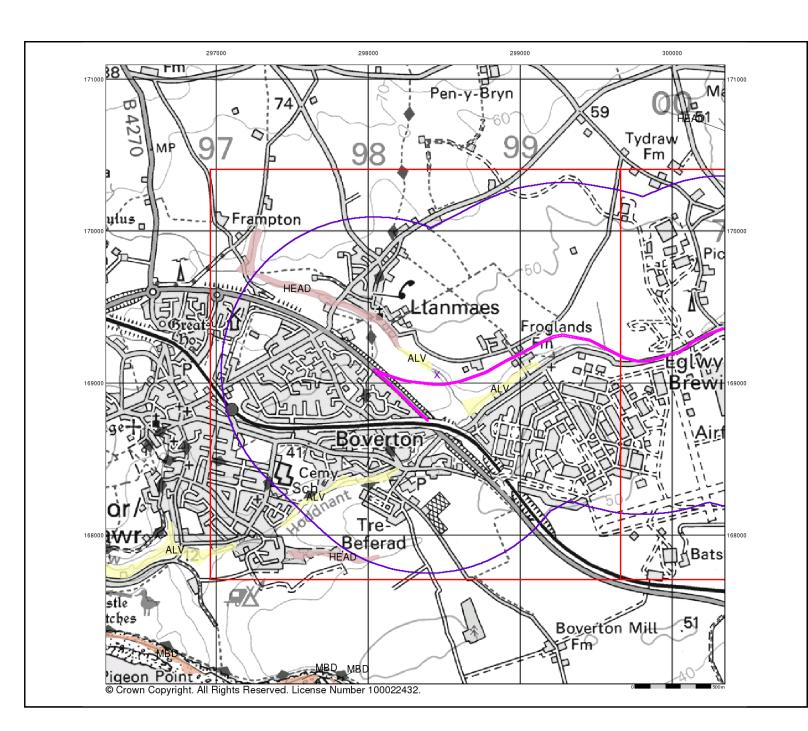
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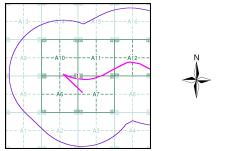
#### **Superficial Geology**

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

### Superficial Geology Map - Slice A



#### **Order Details:**

Order Number: Customer Reference: 91812710\_1\_1 60509148 298450, 169060 National Grid Reference: A 3.32

Site Area (Ha): Search Buffer (m): 1000

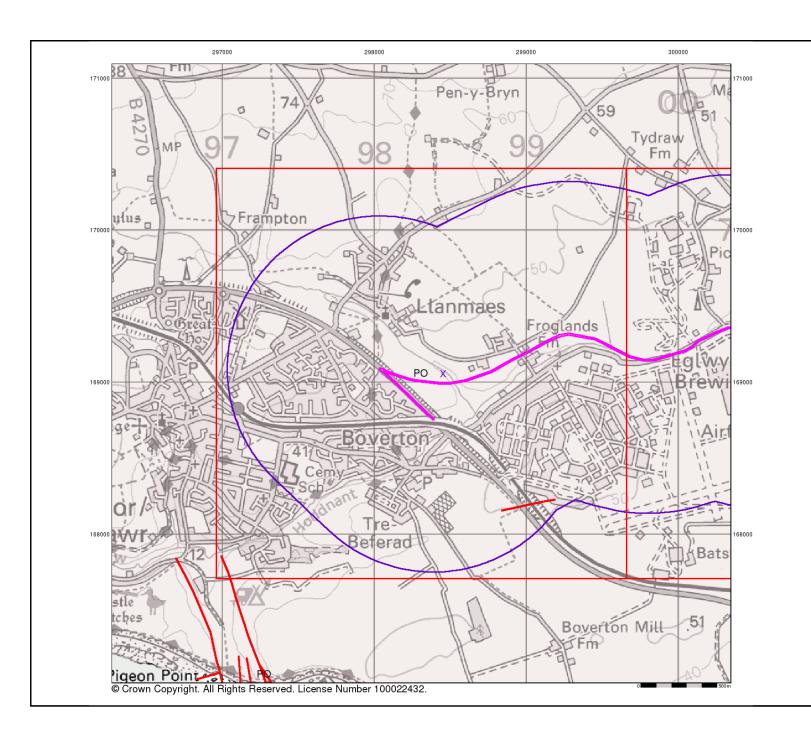
#### Site Details:

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#### **Bedrock and Faults**

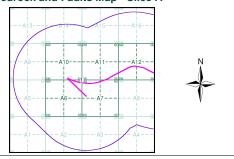
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

#### Bedrock and Faults Map - Slice A



#### **Order Details:**

Order Number: Customer Reference: 91812710\_1\_1 60509148 298450, 169060 National Grid Reference: A 3.32

Site Area (Ha): Search Buffer (m): 1000

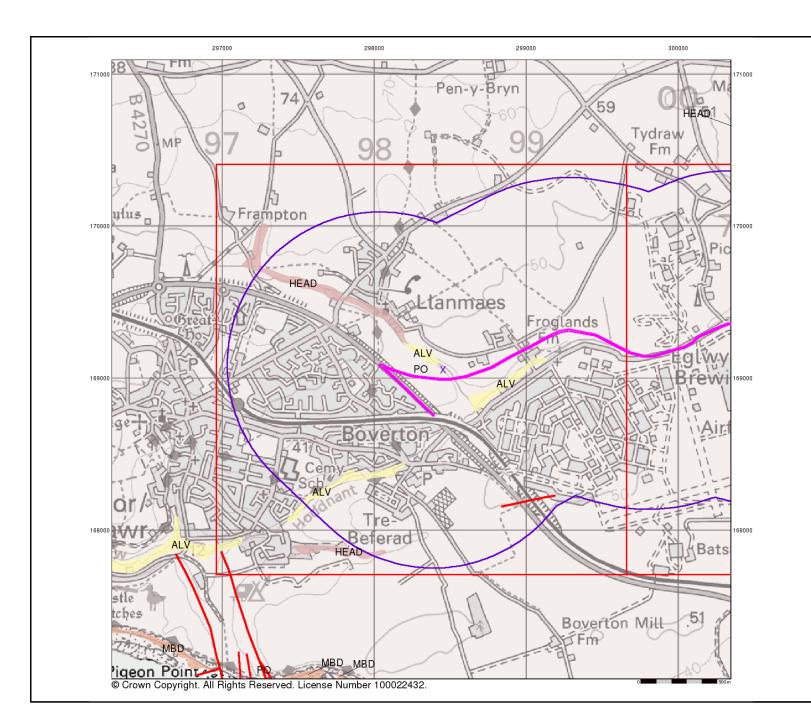
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### **Combined Surface Geology**

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

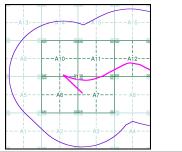
#### **Additional Information**

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS

#### Contact

British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG Telephone: 0115 936 3143 Fax: 0115 936 3276 email: enquiries@bgs.ac.uk website: www.bgs.ac.uk

### Combined Geology Map - Slice A



### **Order Details:**

Order Number: Customer Reference: 91812710\_1\_1 60509148 298450, 169060 National Grid Reference: A 3.32 Site Area (Ha): Search Buffer (m):

1000

### Site Details:

St Athan Route, Cowbridge, South Glamorgan, CF71 7EQ



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