British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Office of the Deputy Prime Minister
Creating sustainable communities

DEVON (North)

(comprising Devon, Plymouth, Torbay, Dartmoor National Park and part of Exmoor National Park)

Mineral Resource Information in Support of National, Regional and Local Planning

Mineral Resources

Scale 1:100 000

Compiled by A.J. Bloodworth, G.E. Norton, C.J. Mitchell, R.C. Scrivener, D.G. Cameron, S.F.Hobbs, D.J. Evans, G.K. Lott and D.E. Highley.
Project Leader: D.E. Highley.
Digital cartography by N.A. Spencer, British Geological Survey.
Published 2006.

This map comprises part of a summary of the 'Mineral Resources of the South West of England Region'.
For further imformation see www.mineralsUK.com

BIBLIOGRAPHIC REFERENCE

Bloodworth, A.J, and 8 others. 2006. Mineral Resource Information in Support of National, Regional and Local Planning: Devon (comprising Devon, Plymouth, Torbay, Dartmoor National Park and part of Exmoor National Park). *British Geological Survey Commissioned Report CR/05/096N*

Production of this map was commissioned and funded by the Office of the Deputy Prime Minister (Contract MP0677).

SAND & GRAVEL

Superficial deposits

- Sub-alluvial: Inferred resources
- River terrace deposits

Bedrock deposits

- Budleigh Salterton Pebble Bed Formation — Sherwood Sandstone Group — Triassic
- Dawlish Sandstone Formation — Permian

CHALK

- Undivided — Cretaceous

LIMESTONE

- Westleigh Limestone Formation, Bampton Limestone Formation — Lower Carboniferous

IGNEOUS & METAMORPHIC ROCKS

- Mafic igneous rocks
- Granite
- Thermal metamorphic aureole (Dartmoor only)

BALL CLAY

- Bovey Formation — Palaeogene

BRICK CLAY

- Crackington Formation (Carboniferous): Exeter area only
- Approximate 10 km limit of resource

MINERAL PLANNING PERMISSION (as at 31.11.05)

Source: Mineral Planning Authorities

- Surface planning permission (valid and expired)
- Underground planning permission (valid and expired)

MINERAL WORKINGS

- Higher Venn — Active site
- *Blackaller* — Inactive (including yet to be worked), worked-out and/or restored site

Bal	Ball Clay	Lst	Limestone
Ba	Barytes	MiB	Mineral Black
Ch	Chalk	MSg	Marine sand and gravel
Cht	Chert	Peat	Peat
Cl	Clay and Shale	San	Sand
CR	Crushed Rock	Sg	Sand and gravel
Fe	Hematite	Sl	Slate
Fi	Flint	Sst	Sandstone
Ig	Igneous/metamorphic rocks		

- ■ Active rail aggregate depot
- ♦ Active marine aggregate wharf

ENVIRONMENTAL DESIGNATIONS (as at 31.12.05)

- National nature conservation designations (SSSIs and NNRs)
- International nature conservation designations (SACs, SPAs and Ramsar sites)
- Heritage Coast
- National Park: Dartmoor (part), Exmoor (part)
- Area of Outstanding Natural Beauty (AONB): North Devon and parts of East Devon and Blackdown Hills
- + Scheduled Monument

ADMINISTRATIVE AREAS

- Mineral Planning Authority (National Parks are also MPAs)
- District

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 and to relate these to selected nationally-recognised planning designations. The maps are intended to assist in the consideration and preparation of development plan policies 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. Information on the extent of mineral planning permissions has been obtained from the relevant Mineral Planning Authority (MPA). Some of these permissions may have lapsed or expired. The status of individual areas can be ascertained from the appropriate MPA. Location information on national planning designations has been obtained from the appropriate statutory body (Countryside Agency, English Nature and English Heritage). For further information the relevant body should be contacted.

The mineral resource data presented are based on the best available information, but are not comprehensive and their quality is variable. The inferred boundaries shown are, therefore, approximate. Mineral resources defined on the map delineate 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 mineral workings may occur in these areas. The presence of these operations generally reflect very local or specific situations.

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.

BUILDING STONE

BRICK CLAY

PLANNING PERMISSIONS FOR MINERAL EXTRACTION

BALL CLAY

... Ball clay has been worked in the Petrockstowe Basin at two locations. WBB Minerals operate at Peters Marland at the northwestern end of the basin (Westbeare and Courtmoor quarries) and, at the southeast end, operations by IMERYS were close to Meeth (Glebe, Stockleigh Moor and Woolladon quarries). However, IMERYS ceased production at the end of 2004, because of the high costs of extraction.

HYDROCARBONS

Conventional oil and gas

Exploration for both gas and oil has occurred onshore in the east of the county, which lies on the extreme western limits of the Wessex Basin. Within this basin, major oil discoveries have been made in the Jurassic and Triassic rocks of Dorset. However, the main Mesozoic source and reservoir rocks are absent in Devon. The lack of an adequate or proven older source rock means that the thick Permo-Triassic rocks encountered in the Crediton Trough are unlikely to be prospective for hydrocarbons.

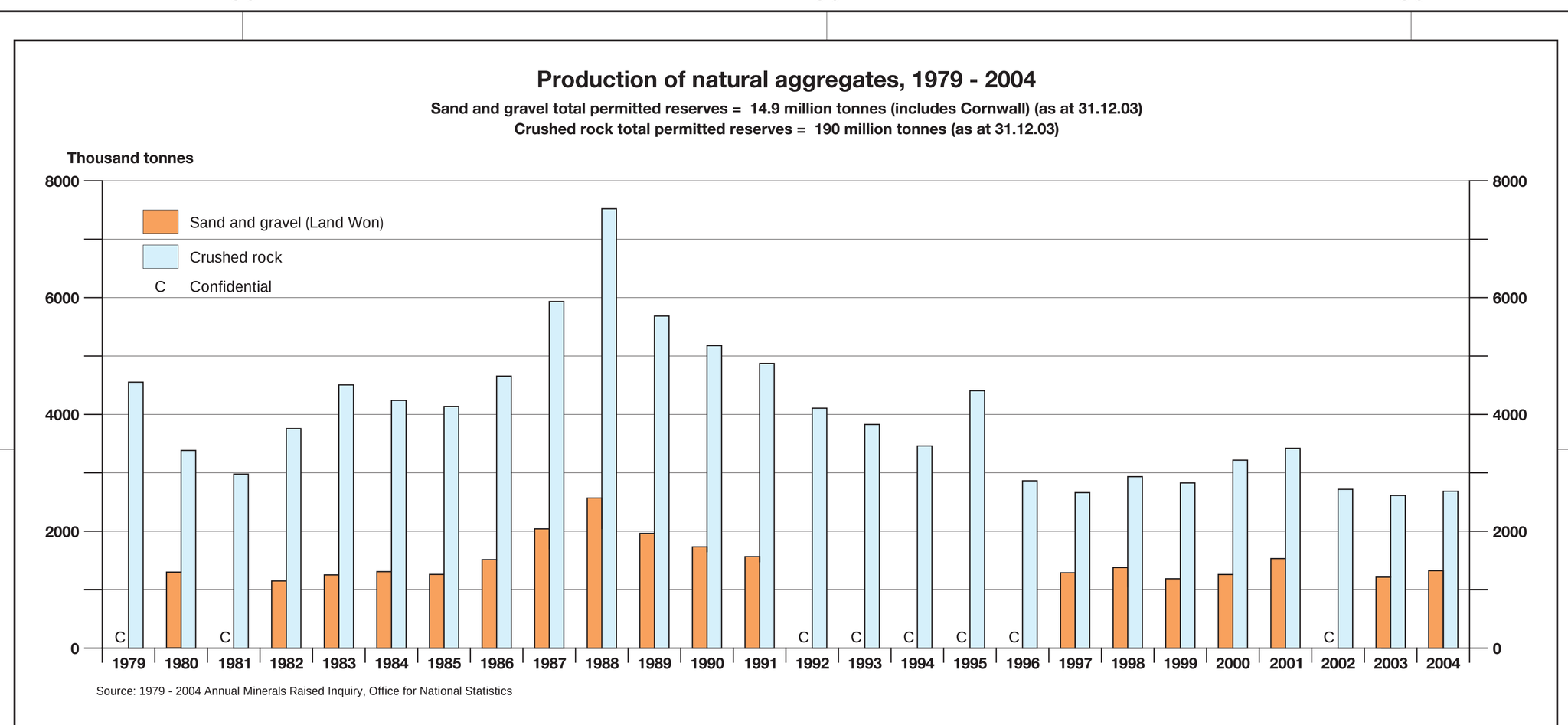
British Gas is the only company to have explored for hydrocarbons in the county. No oil or gas shows were recorded in an exploratory borehole and the well was plugged and abandoned as dry (see below). As of late 2005, no active exploration licences were held in the county.

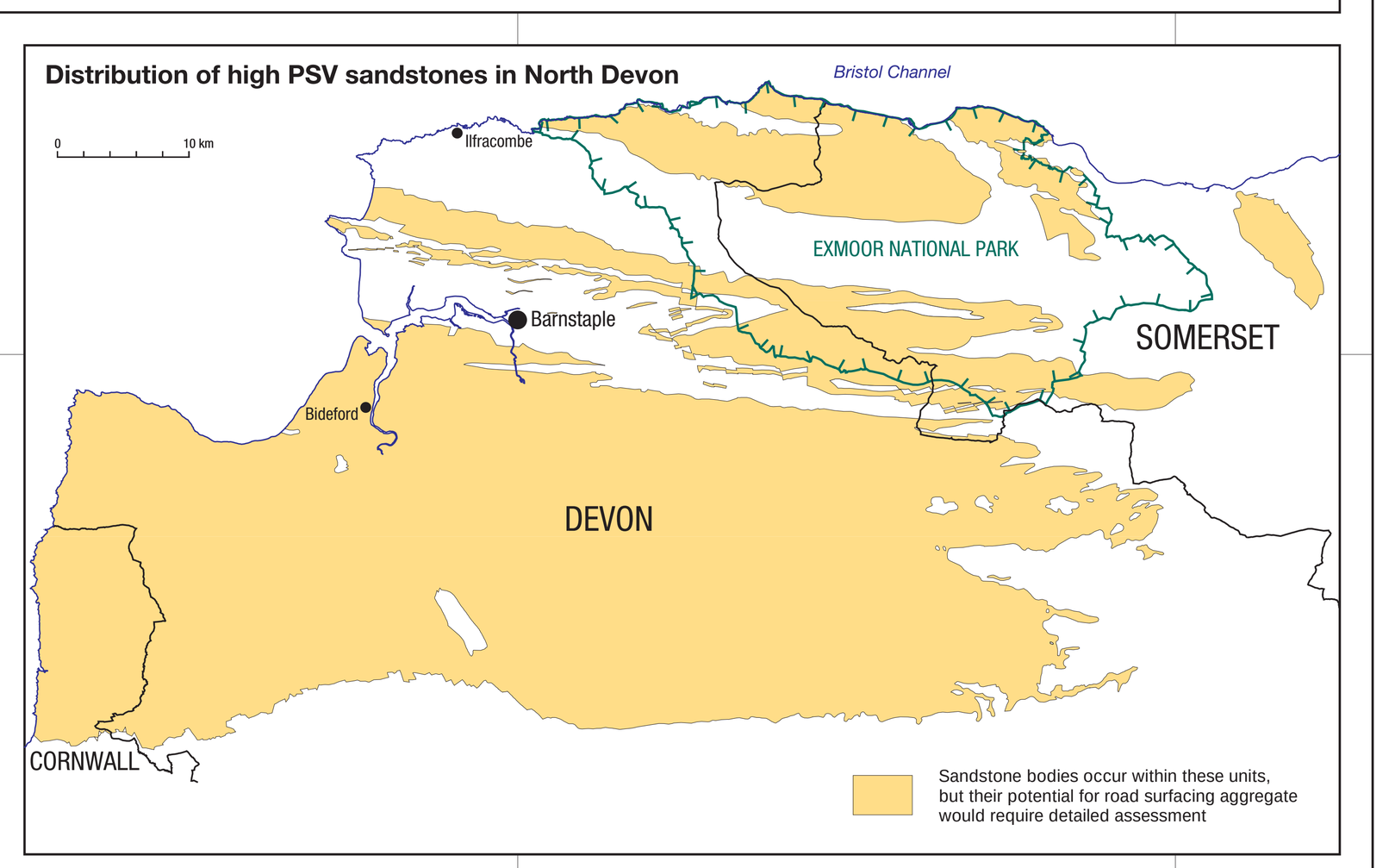
Coalbed Methane (CBM) and Underground Coal Gasification (UCG) potential

There is no potential for CBM or UCG in Devon because of the absence of significant coal resources.

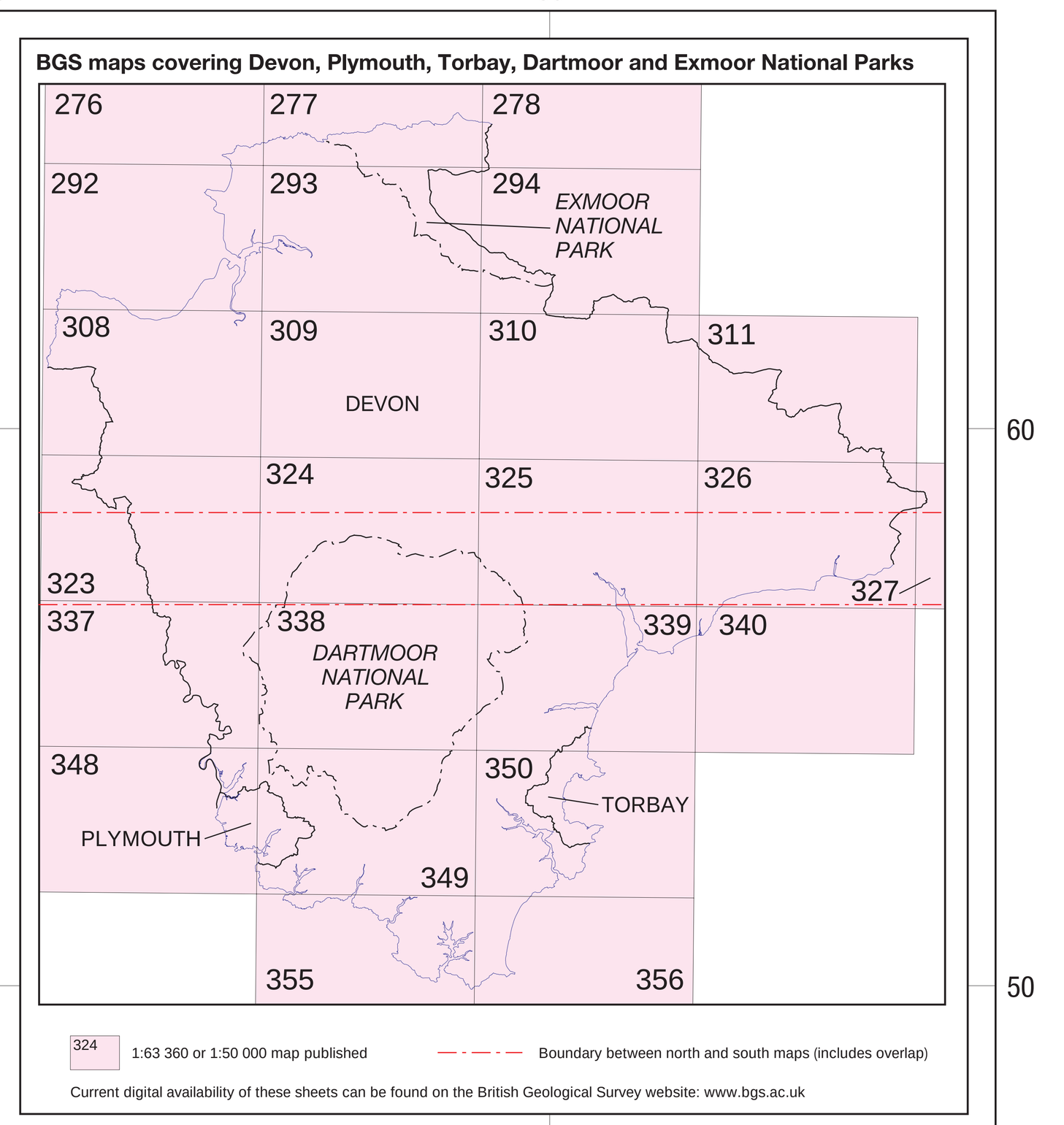
Name	Date	Company	Status
Musbury No.1	1986	British Gas	Plugged and abandoned, dry

METALLIFEROUS AND RELATED MINERALS





CRUSHED ROCK AGGREGATES



SAND AND GRAVEL