



BRITISH GEOLOGICAL SURVEY

DOE

PEAK DISTRICT NATIONAL PARK

A Summary of Mineral Resource Information for Development Plans

Mineral Resources

Scale 1:100 000

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Topography based on the Ordnance Survey 1:100 000 scale County maps.
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Positions of Scheduled Monuments at 31st March 1994 as supplied by English Heritage.
Monuments scheduled or descheduled since that date are not accounted for.
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AIMS AND LIMITATIONS
The purpose of the maps and associated reports 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 constraints. 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. 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 collation and interpretation of mineral resource data principally held by the British Geological Survey. Information on mineral planning permissions has been obtained from the relevant Mineral Planning Authority. 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 Commission, English Nature and English Heritage). For further information, the appropriate 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. Extensive areas are excluded 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 which are referred to in the accompanying report.
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 acquisition or use of a particular piece of land, although they may give useful background information which sets a specific proposal within context.

Sandstone
The sandstones of the Millstone Grit are an important source of building stone for walling and paving, including sawn and handcrafted stone. The Ashover Grit in the Birchover - Stanton area is particularly valued, but other sandstones are also important. The Millstone Grit is also worked near Glossop for less demanding aggregate applications and was formerly worked for this purpose near Holmfirth.

Cement raw materials
Portland cement is manufactured by the reaction of a mixture of calcareous and clayey materials at high temperatures the resulting clinker being ground with a small proportion of gypsum/anhydrite to control the setting time of the finished cement. At the Hope cement works, near Castleton the main calcareous component is limestone quarried from the Monsal Dale Limestones. The Edale Shales at the base of the Millstone Grit supply the necessary silica, alumina and iron oxides for the production of cement clinker.

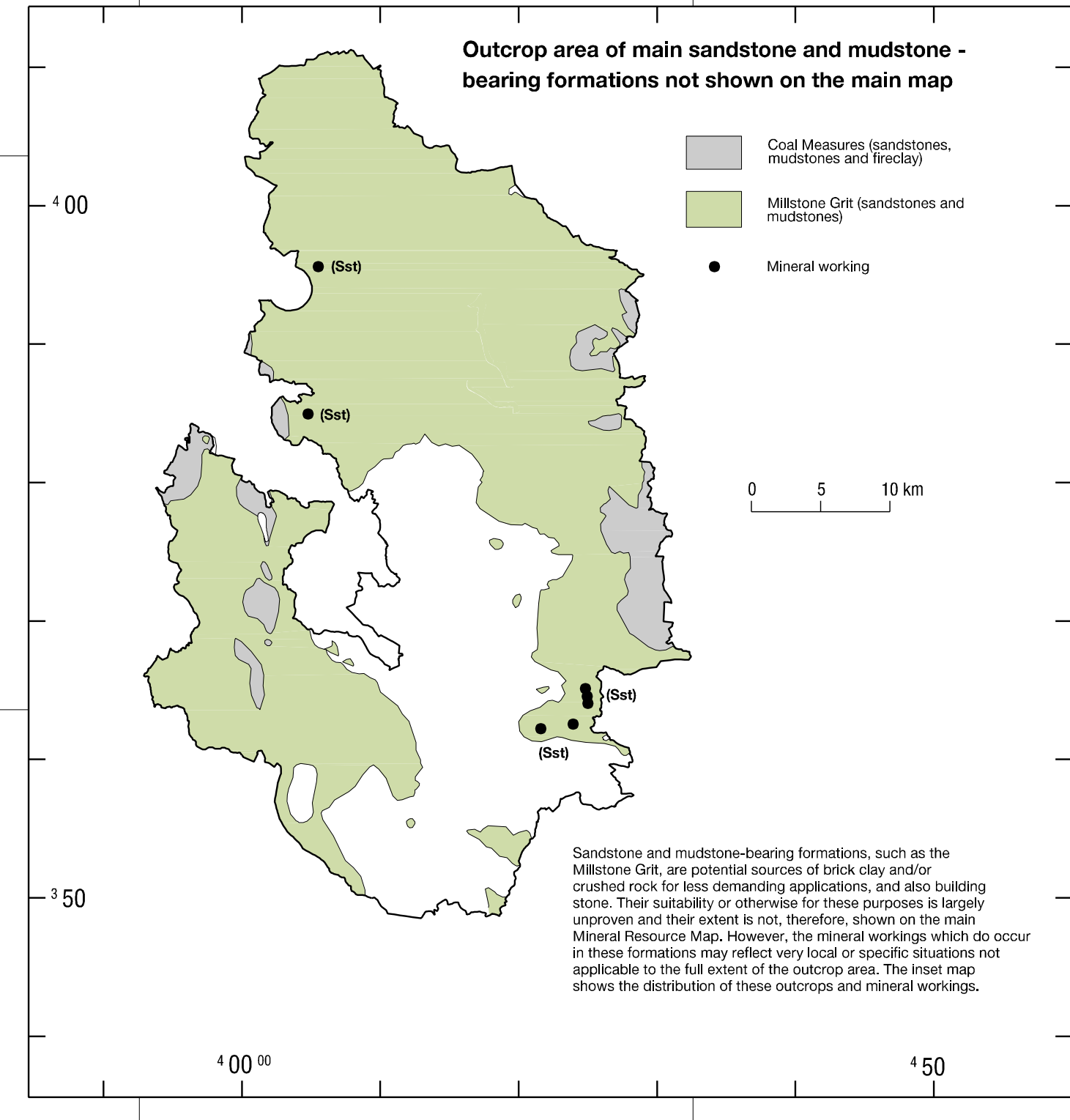
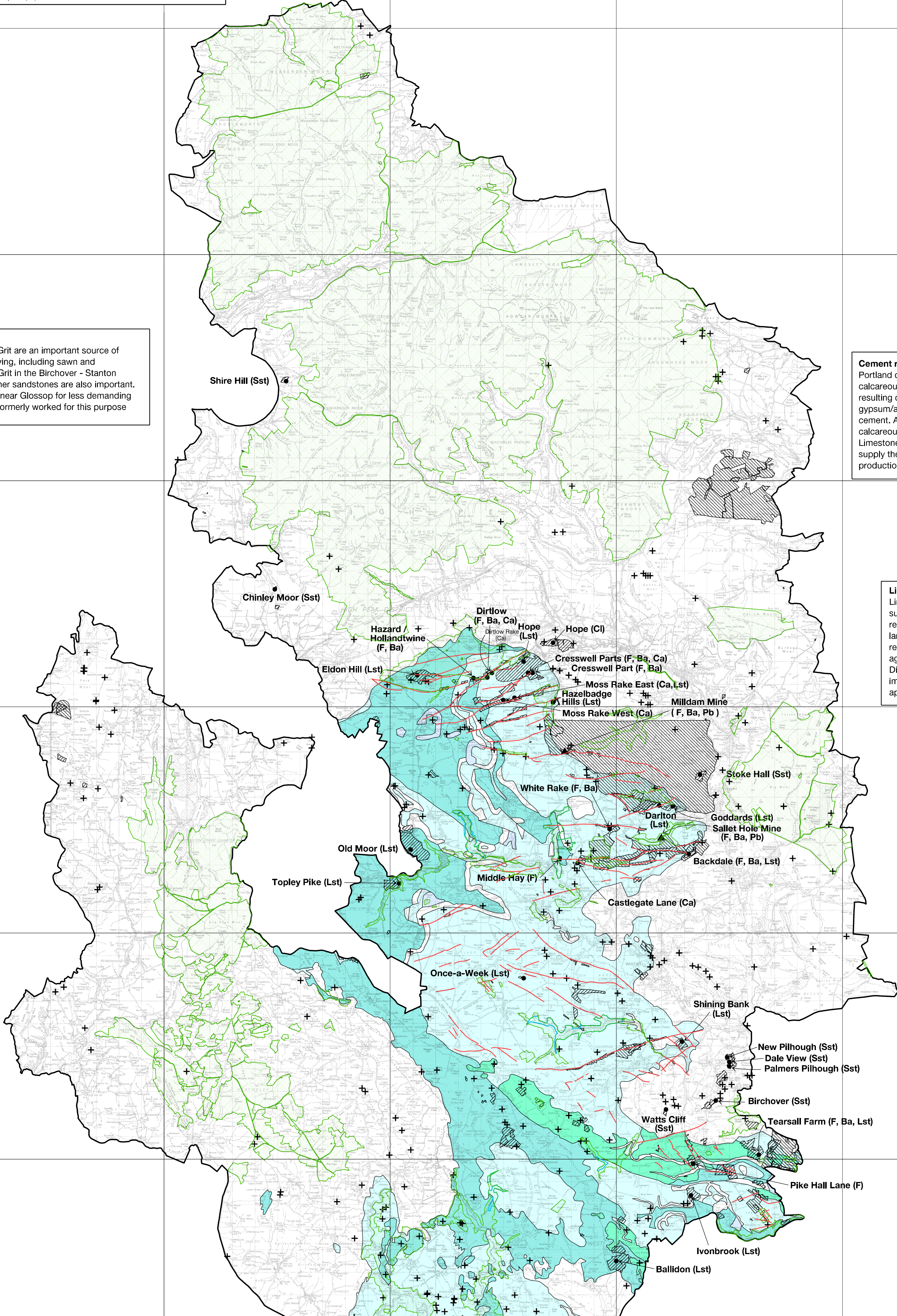
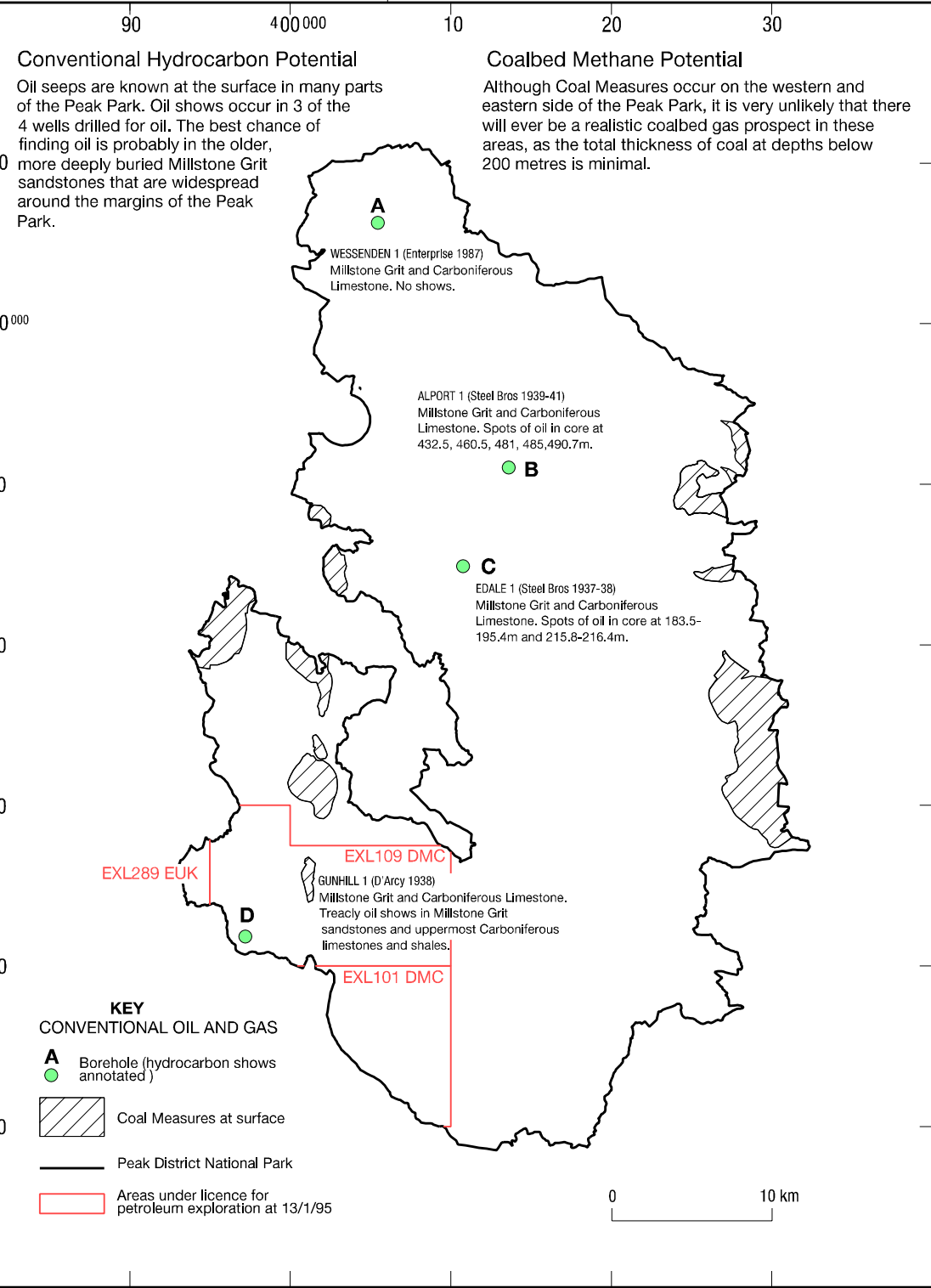
Limestone
Limestones of Carboniferous age produce strong aggregates suitable for use in concrete and for roadstone. With moderate resistance to abrasion and a low polish resistance the are largely unsuitable for road surfacing. Dolomitic limestones are relatively weak and porous and generally produce lower quality aggregates. Extensive areas of Bee Low Limestones in the Peak District are of a consistently very high chemical purity and with low impurity levels are suitable for a wide range of industrial applications.

'Vein' minerals
The Peak District has traditionally been the main source of fluorspar in Britain. Ore is produced from openpit workings and underground mines and output is currently concentrated in the area between Longstone Edge and Castleton. Typical ore grades fall in the range 20-50% CaF₂, the higher grades being from underground mines. All the ore is treated at the Cavendish Mill near Stoney Middleton and barytes (BaSO₄) and galena (PbS) are produced as by-products. Small amounts of calcite are produced by independent producers.
The F-Ba-Ca-Pb mineralisation occurs in fissure veins in limestone, the main mineralisation being confined to the eastern part of the orefield. Only the major veins are shown on the map. There is a broad zonation of minerals with dominant fluorspar in the east and barytes and calcite becoming more abundant westward. After a long history of extraction many of the major veins are depleted as sources of openpit fluorspar. Current exploration is being directed towards finding concealed orebodies related to cavity infillings and replacement deposits in receptive limestones. The mineralogy of these differs somewhat from that in the veins and fluorspar may occur more extensively to the west than previously anticipated.

Fireclay
Extensive old planning permissions, mainly for underground mining of fireclay, occur in the Bradfield area. The fireclay worked was the Stanington Pot Clay which was formerly valued as a steelmaking refractory. Changes in steelmaking technology has resulted in more severe operating conditions and the fireclay is unlikely to be of future economic interest.

Silica Sand
Silica sand occurs locally in 'Pocket Deposits' formed in solution hollows in the Carboniferous limestones of the White Peak. The sands are naturally bonded with a kaolinitic clay and, because of their refractory properties, were used in the manufacture of a range of refractory products, for example at Friden. More demanding operating conditions have limited their use and they are unlikely to be of future economic interest for refractory applications.

Chert
Chert beds within the uppermost Monsal Dale Limestones were formerly worked in the Bakewell area by both underground mining and surface working. The chert was used to produce hand-trimmed blocks for use as 'runners' in the old type of pan mills formerly extensively used in the pottery industry for grinding raw materials. These have been replaced by ball mills and the last chert mine closed in 1968.



LIMESTONE

- Limestone resources
- Very high purity limestone (>98% CaCO₃)
- Dolomite and dolomitic limestones

'VEIN' MINERALS

- Major mineral veins

IGNEOUS INTRUSIVE

- Dolerite

MINERAL WORKINGS

- Surface mineral working
- Underground mine

Mineral Commodity

- Lst Limestone
- Sst Sandstone
- Ci Common clay and shale
- F Fluorspar
- Ba Barytes
- Ca Calcite
- Pb Lead ore

MINERAL PLANNING PERMISSIONS (as at 1.6.94)
Source: Peak Park Joint Planning Board

- Surface planning permission
- Underground planning permission

ENVIRONMENTAL DESIGNATION

- Site of Special Scientific Interest
- National Nature Reserve
- Scheduled Monument

ADMINISTRATIVE AREAS

- Peak District National Park