The BGS holds records dating back over two hundred years. As **Rod Bowie** explains, this venerable geoscientific archive is as valuable as ever in the digital age.

Essential information

The National Geological Records Centre (NGRC) holds the information that results from 170 years of surveying and exploration carried out by the BGS and many other organisations. This information provides the basis for our interpretation of all aspects of geoscience and geohazards. Subject to commercial confidentiality, it is available to all and is used to answer thousands of enquiries every year.

Historical information on the exploration and exploitation of metalliferous and industrial minerals, water, coal, oil, and gas can be used again for further exploration. It is often reused for new or completely different areas of research beyond its original purpose. Information from coal exploration and exploitation is being used to reassess sites and to look at the potential for exploitation of coal bed methane and for the gasification of coal. The records include over 8500 opencast sites records, over 40 000 deep coal bores or pits, some 10 000 line kilometres of seismic surveying, and thousands of coal analyses.

Large quantities of site investigation information have been deposited by companies involved in developing both greenfield and brownfield sites. Major engineering projects and road building also provide large volumes of data. These data can form the basis for subsequent work by providing information about the nature of a site, such as geotechnical properties, water levels, and geochemical data.

The records of boreholes drilled for minerals and water are covered by the Mining Industry and Water Resources Acts, but the majority of the 1.2 million records held in the NGRC have been donated on a voluntary basis. The records date back to the late eighteenth century and have been systematically collected since 1860. Early records may be less advanced or comprehensive than modern examples, but if accurate can be extremely valuable, particularly when providing information about potential geohazards.

We have compiled detailed maps of the UK since the late 1850s. Our surveyors have created a unique detailed record of the geology and of land use over time. The collection holds nearly 70 000 field maps and some 7000 currently approved versions of the geological map. A great deal of the historical site information that has been recorded is no longer visible to current surveyors. This information becomes particularly useful when used in conjunction with modern surveys to identify potential geohazards and to provide site-specific information for planning and development.

The Records Centre currently receives routine deposits from over 100 companies. In recent years major deposits have been made by: British Coal, the Coal Authority, English Partnerships, RTZ and ICI. Much

information is still held on paper, but increasingly the records produced by us, and by other organisations, are delivered and maintained in digital formats. A large proportion of the regularly used records have been converted into digital images and new accessions are routinely scanned upon receipt. Indexes to this information are available via the GeoIndex (www.bgs.ac.uk/geoindex).

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Records are routinely scanned upon receipt, but the original records can be accessed on request.