

Are we in the twilight years for North Sea oil and gas production? **Mike Howe** reveals that the licensing business remains brisk and is keeping the BGS borehole collections much in demand.

# Core value

The official 2006 figures for UK offshore oil production, onshore oil production, and total gas production each showed a decline from 2005 and a substantial decline from 2002. In contrast, applications for new oil and gas exploration and production licences in the 24th Licensing Round were at a 35-year high. Malcolm Wicks, the Energy Minister at the time (June 2006), commented: 'Some say the North Sea is in its twilight years. But the record numbers of licence applications belie this... Interest in the North Sea is still high because determined companies realise that our remaining reserves almost match what we have already exploited.'

The major operators have been reducing their commitments in the North Sea, but they have been balanced by newer and smaller firms entering the sector, encouraged by the new 'Promote' Licence, offered at a much reduced initial cost and without the stringent entry checks required as part of the traditional licence. Smaller firms entering the sector are especially dependent on easy access to existing datasets, such as seismic surveys, well reports, and borehole samples. Business models for the exploitation of smaller fields and the enhanced recovery of the remaining reserves in existing fields frequently depend on the use of these data. The DEAL website (Digital Energy Atlas and Library) and the DTI's Release Agents provide a portal to digital data and reports, and access to the cores and samples is provided by the BGS and the National Hydrocarbons Data Archive.

Operators applying for licenses are required under PON9 & PON9b (Petroleum Operations Notices) to submit sets of washed and dried cuttings samples and slabs of all cores taken. Samples from offshore wells must be deposited with the BGS Gilmerton core store, while those from onshore wells are stored in the BGS Keyworth core store. These samples are held in confidence



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*The BGS Gilmerton core store, housing the offshore borehole collection.*

until the well is released by the Department for Business, Enterprise and Regulatory Reform (generally after three or four years). Thereafter, they are freely available for study and subsampling. In return, copies of any raw data, plus any interpretative reports produced, must be lodged with the BGS within three and six months, respectively. These are then held in confidence for an agreed period. The onshore collection also includes many boreholes drilled by the BGS or

other organisations for reasons other than hydrocarbon extraction, but that may still be relevant to oil and gas exploration.

Access to borehole samples at Keyworth and Gilmerton by the hydrocarbons industry is now greater than it has been for many years and is directly related to the increase in licensing interest. The collections at Keyworth and Gilmerton underpin most of the new exploration activity and are therefore essential to the UK's economy.

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*For details of UK oil and gas production, see the Department for Business, Enterprise and Regulatory Reform's Oil and Gas website at: [www.og.dti.gov.uk/information/statistics.htm](http://www.og.dti.gov.uk/information/statistics.htm)*

Borehole Collection Details		
Core store	BGS Keyworth	BGS Gilmerton
Collection	Onshore (landward) boreholes	Offshore (seaward) boreholes
Scope	Hydrocarbons, coal & mineral exploration, site investigations, stratigraphy etc.	Hydrocarbons
Boreholes	15 000	6000
Drillcore	225 km	290 km
Cuttings	2 million samples	3 million samples

*Summary of the BGS borehole collections.*