BGR Bundesanstalt für Geowissenschaften und Rohstoffe

GFZ Helmholtz-Zentrum Potsdam

HELMHOLTZ ZENTRUM FÜR UMWELTFORSCHUNG UFZ

Umweltverträgliches Fracking ?

- Geologische Potenziale und technische Herausforderungen -
24./25. Juni 2013 in Hannover

Peter Britze took his MSc in Petroleum Geology at the University of Copenhagen in 1990. In 1996 he was awarded with the Danish Geology Award. Peter is currently Head of the Department of Reservoir Geology, at the Geological Survey of Denmark and Greenland (GEUS). He is Manager of the Source Rock, Core, and Clay Minerals laboratories, and responsible for the scientific work and consultancy on conventional and unconventional fossil fuels in Denmark. GEUS managerial contact person with the Danish Energy Authorities. Peter also Chair the EuroGeoSurveys GeoEnergy Expert Group dealing with geo-energy in Europe.

Geological Survey of Denmark and Greenland (GEUS)
Peter Britze – Head of Department Reservoir Geology
GEUS
Øster Voldgade 10, 1350 Copenhagen K, Denmark
Tel. +45 3814 2424
Mail: pbr@geus.dk
Internet: www.geus.dk

Hydro fracking in Denmark

Within the European Union Denmark is the only net exporter of hydrocarbons, due to the oil and gas produced from the westernmost part of Denmark, The Danish Central Graben. The oil and gas production is predominantly coming from the Upper Cretaceous Chalks, which is characterized by its high porosity and low permeability. In order to maximise the production the petroleum companies have developed the technique through the last four or five decades – from vertical wells to long horizontal wells with multistage fracks and imbibition of water, using the FAST technology (Fracture Aligned Sweep Technology).

So in order to enhance the oil recovery multi stage fracking is often carried out in the Danish offshore and partly due to this fracking, oil and gas revenues play an essential role in Danish economy. Revenues from the oil and gas production were in 2011 30.6 billion DKK.

Onshore Denmark approximately 60 exploration wells have been drilled since the Harte-1 well in 1938. The success rate of these wells has been very poor, and as a consequence none of the wells have been fracked.

In Denmark two licenses for exploring for shale gas is held by Total. The two licenses are in North Jutland and in Northeast Sealand respectively. Total has planned a well in North Jutland, but the drilling plans have been delayed, due to local opposition and heighten demands to the environmental impact assessment from the local authorities. The drilling is now postponed till 2014.

The Danish minister for Climate, Energy, and Buildings has declared a pause for new licenses with shale gas as target. Denmark will await the experiences on the resources and environmental impact footprint gained from the two active shale gas licenses, before deciding on the possible future development of shale gas.