 www.geus.dk


Hydro fracking in Denmark

Peter Britze

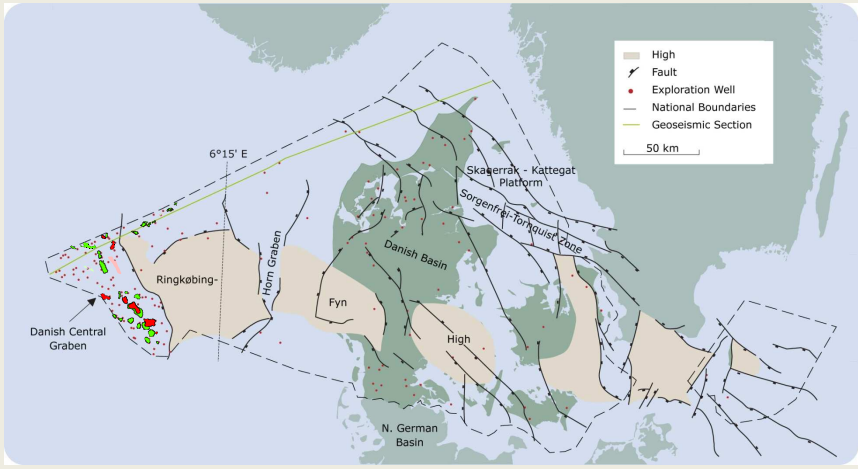
Geological Survey of Denmark and Greenland
Ministry of Climate and Energy

G E U S

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Structural setting



High
Fault
Exploration Well
National Boundaries
Geoseismic Section
50 km

6°15' E

Ringkøbing-
Danish Central Graben

Fyn Graben

Fyn

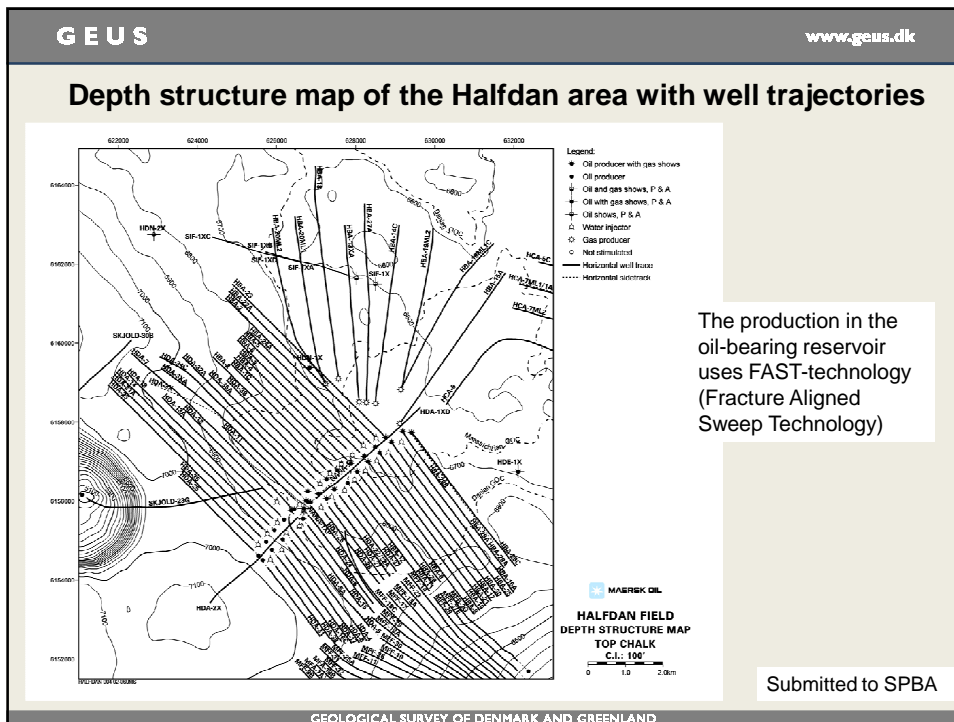
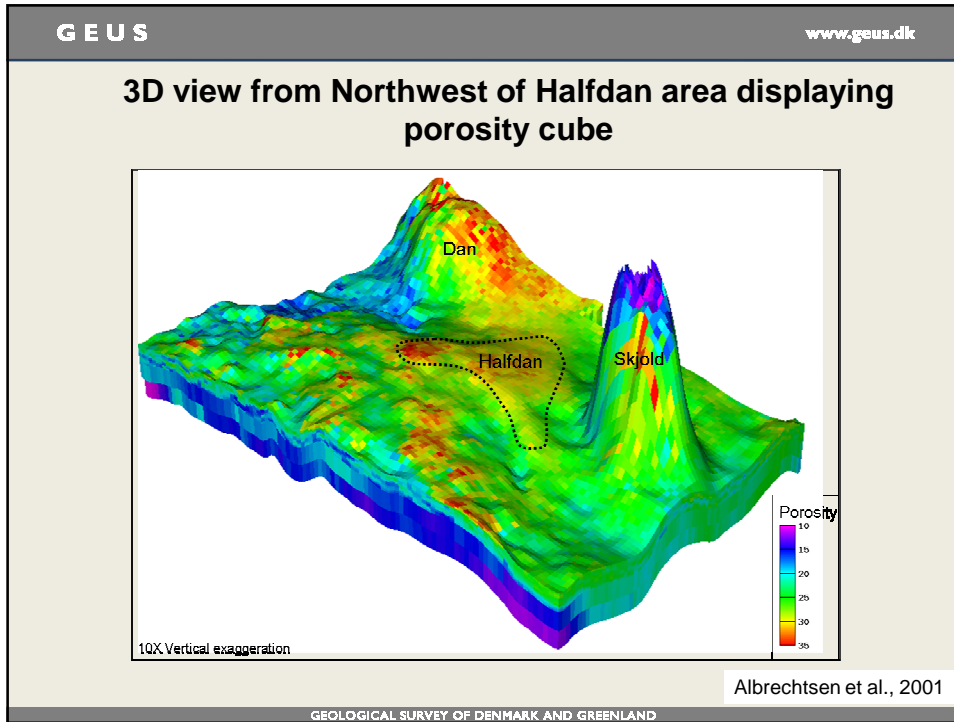
Danish Basin

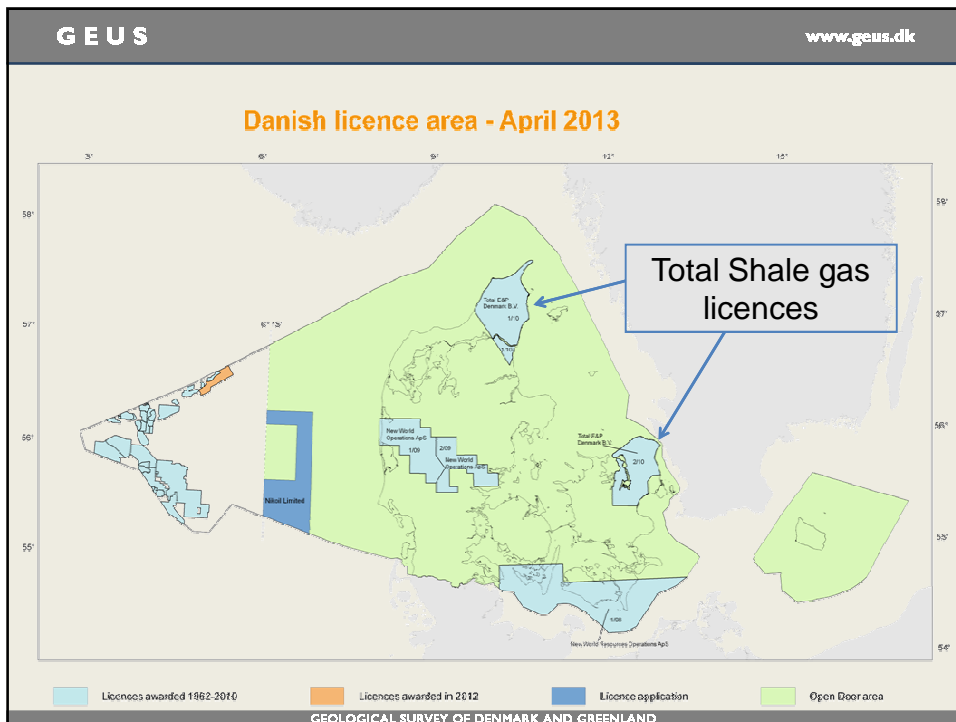
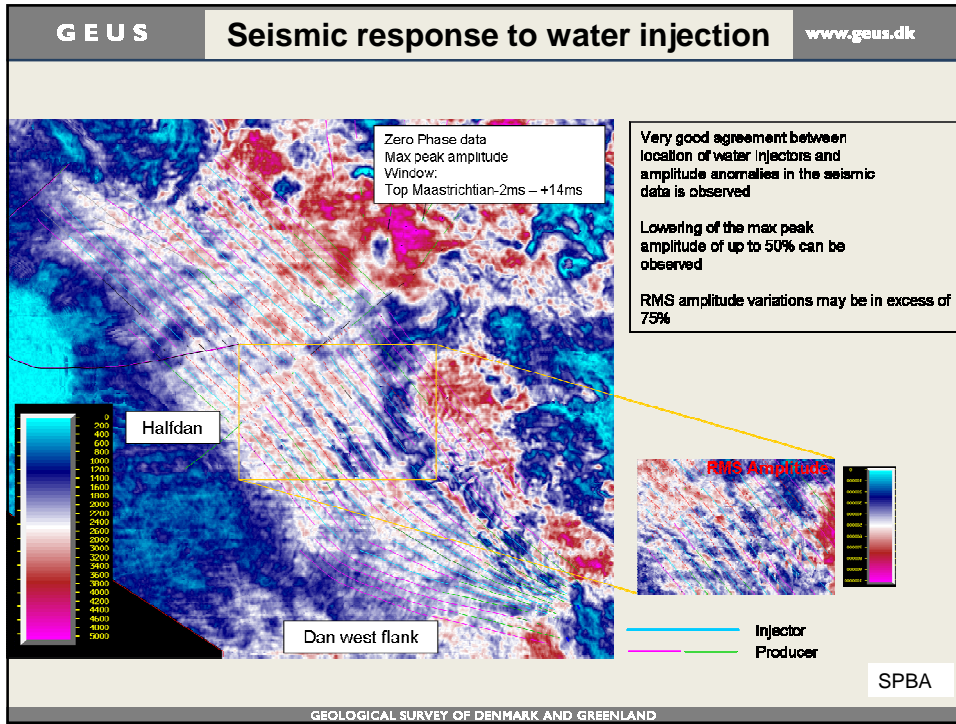
N. German Basin

Skagerrak - Kattegat Platform

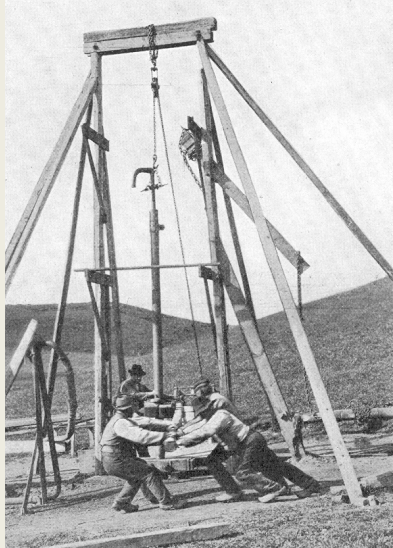
Sorøen-Fynskovsøfte zone

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Skærumhede well, TD: 235 m

Drilled from 2nd August to 17th November 1905. Cost 12.000 DKK.

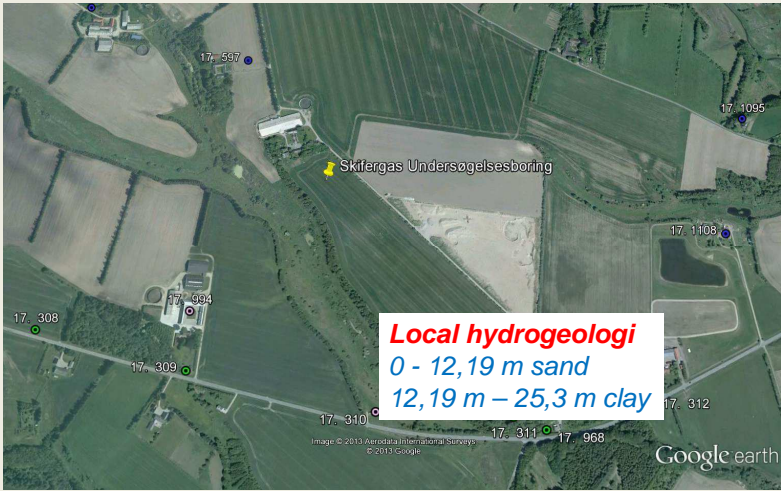
Biogene methane encountered in five levels (5, 42, 78, 106 og 180 m).

Biogenic methane was locally used for heating in the 1940 – 1950.

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Total drilling site in North Jutland



Local hydrogeologi

0 - 12,19 m sand

12,19 m – 25,3 m clay

GEOLOGICAL SURVEY OF DENMARK AND GREENLAND

Base line studies

- *Nature, ecosystems*
- *Noise*
- *Landscape*
- *Soil quality*
- *Groundwater (water sampling from wells 2.5 km)*
- *Streams (water samples with CH₄)*
- *Micro seismic activities*

Summation

- Fracking is carried out in the Danish offshore chalk fields
- Important for Danish economy
- Fracking not yet carried out onshore Denmark
- Total holds two shale gas licenses
- First well postponed till 2014
- Baseline studies
- Danish pause for new licenses with shale gas as target – await the experience of the Total licenses