

Regional PhaseFinder Package Mid-Norway

GEOS4'S EXCLUSIVE PHASEFINDER TECHNOLOGY

This science-based technology accurately predicts charge timing, fluid volume and composition rapidly and inexpensively, based on calibrations from major petroleum provinces worldwide using PhaseKinetics*.

Haltenbanken can be classified as a mature exploration area, where black oils through gas condensates have been discovered. Multiple sources, as well as timing and extent of overpressure, are key elements in this province. The Vøring area is the new frontier. Up to now only gas has been discovered in commercial quantities.

The GEOS4 Mid-Norway package provides

- representatives of eight key immature source rocks,
- kinetic parameters for timing predictions using slow heating rates,
- Petroleum Type Organofacies for predicting bulk petroleum types,
- 2- and 4-component gas/oil ratio prediction in time and space,
- 14-component physical property/PVT prediction in time and space,
- kinetic data provided as tables as well as digital files for direct import into PetroMod® (SLB).

Available upon request:

- PhaseKineticsPlus includes stable carbon isotopes on C₁-C₄ components in addition to the above.



* di Primio, R. and B. Horsfield, 2006, From petroleum type organofacies to hydrocarbon phase prediction: AAPG Bulletin, Vol. 90.

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APPROXIMATE 40% SAVING ON
REGULAR PRICES WHEN YOU
PURCHASE THIS PHASEFINDER**

Vøring Area

Haltenbanken

NORWAY

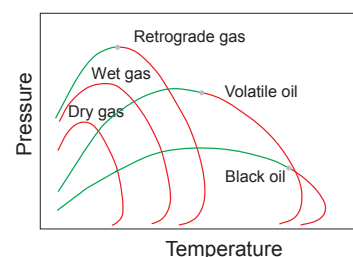
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UNIQUE SOURCE ROCK SAMPLE SUITE

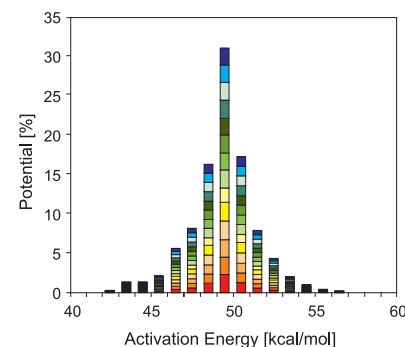
All source rock samples are immature and represent a regionally significant petroleum source rock type. For the main source rock, the Spekk formation, we have access to three samples covering the known facies variability.

The Norwegian Petroleum Directorate has defined a total of eight plays covering Carboniferous to Tertiary intervals. Key source rocks are the Jurassic shales and coals of the Spekk and Åre formations, respectively.

However, Permian source potential is likely and the importance of secondary sources within the Jurassic has been largely neglected. Prospectivity in the Vøring area is largely dependent on the presence of a Cretaceous source rock.



Formation	Age	Origin	Depth (m)	OM Type
Lange	Hauterivian/Turonian	6507/3-3	3000	Type II/III
Spekk	Oxfordian/Ryazanian	6407/9-8	1610	Type II
Spekk	Oxfordian/Ryazanian	6608/10-4	2335	Type II
Spekk	Oxfordian/Ryazanian	6608/10-9	2048	Type II
Melke	Bathonian/Callovian	6507/12-1	2050	Type II/III
Not	Bajocian	6507/12-1	2125	Type II/III
Åre	Rhaetian/Sinemurian	6407/2-2	3020	Type III
Ravnefjeld	Wuchiapingian	E. Greenland	outcrop	Type II



GEOS4's Mid-Norway PhaseFinder package allows the combination of source specific compositional predictions of petroleum with petroleum system modelling.

The correct reproduction of petroleum phase behaviour represents a major step forward in modelling fluid generation, migration and accumulation in this complex setting.