

Regional PhaseFinder Package Posidonia NL

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*.

The Netherlands represent a mature petroleum exploration area, with the main oil source rock being the Toarcian Posidonia Shale. The unconventional potential of the Toarcian onshore has yet to be tested, but the maturity range present indicates the likelihood of an unconventional liquid play.

Application of our unique PhaseKinetics approach allows to map the liquid-to-gas cut-off in time and space, a key issue in identifying unconventional sweet spots or addressing petroleum quality in conventional prospects.

The GEOS4 Posidonia NL package provides

- a representative of one key immature source rock,
- 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.



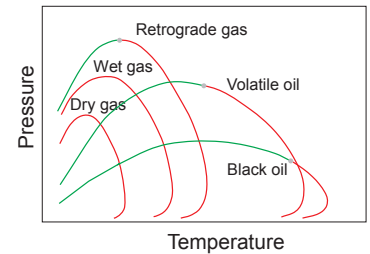
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NETHERLANDS

UNIQUE SOURCE ROCK SAMPLE SUITE

A carefully selected representative sample of the Toarcian Posidonia Shale is available here.

During deposition of the Posidonia Shale basin circulation was restricted resulting in anoxic bottom waters and deposition of a bituminous shaly claystone. The Toarcian in The Netherlands is underlain by dark grey or black silty claystones, and overlain by marine silty mudstones and greensands, providing an excellent setting with unconventional liquid potential.



Formation	Age	Origin	Depth interval (m)	OM Type
Posidonia	Lower Toarcian	L05-04	2,755 – 2,770	Type I/II

GEOS4's Posidonia NL 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.

