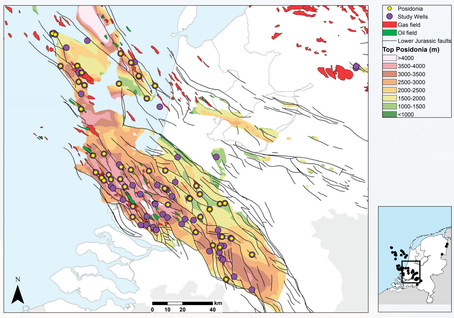
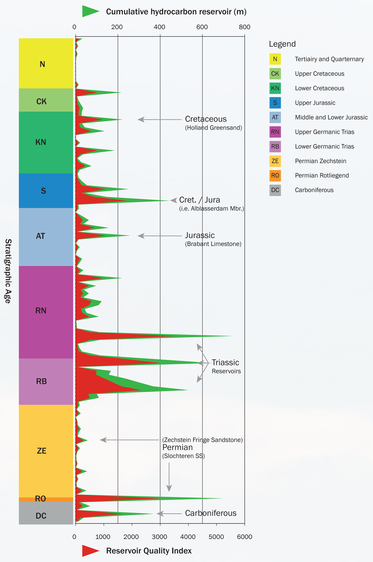
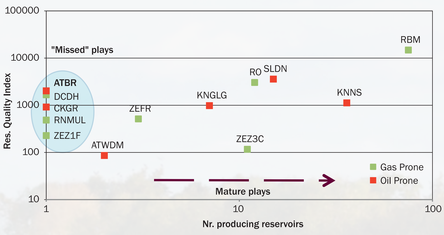
New insights from old data

Bypassed pay potential in the Netherlands

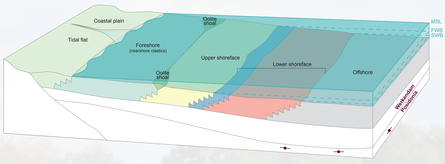
In 2013-2014 a total of 110 wells located in the West Netherlands and Broad Fourteens Basins were investigated for bypassed pay potential. Prior to interpretation all wells received resolution enhancement processing.







Outcome of the petrophysical analysis for bypassed pay. Peaks mark the main hydrocarbon bearing reservoir formations in the study area.



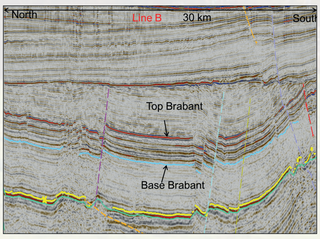
Rerservoir Quality Index plotted against number of producing fields. The potentially overlooked exploration opportunities plot on the Y-axis in the blue area. They are:

- Jurassic Brabant Limestone (ATBR).
- Carboniferous Hellevoetsluis Fm (DCDH)
- Chalk Group (CKGR)
- Triassic Lower Muschelkalk (RNMUL)
- Permian Zechstein 1 Fringe Carbonate (ZEZ1F)

Other identified bypassed pay potential may exist in the Jurassic Middle Werkendam Member (ATWDM), the Zechstein Fringe Sandstones (ZEFR) and Creataceous Holland Greensand Member (KNGLG).

Reservoir Quality Index

For the purpose of this study the Reservoir Quality Index is defined as the product of hydrocarbon bearing Net Pay (m) and a reservoir quality indicator ranking on a scale from 3 (lowest quality) to 5 (highest quality). The criteria for the reservoir quality indicator are based on a series of Vshale, Porosity and Saturation cutoffs defined per stratigraphic unit.



Above results originate from the study of the highest ranking opportunity identified during the study, The Middle Jurassic Brabant Limestone: Identifying overlooked exploration opportunities from bypassed pay analysis (MSc thesis M.C. Bussmann 2014). Other potential plays will be studied later.

For all information and data on Exploration and Production in the Netherlands, see the Netherlands Oil and Gas Portal

www.nlog.nl & www.ebn.nl

Scan the QR code to enter our digital booth