Source rock potential of the Dutch northern offshore

Presence of source rock bearing units

- Oil shows in the A quadrant may be linked to early mature Upper Jurassic 'hot shale', similar to Jurassic source rocks in the Danish and German offshore.
- Gas and oil shows indicate that intra-Zechstein source rocks are present and mature in the Step Graben.
- Namurian shales may provide additional charge in the southern E and F blocks.
- Westphalian coal measures provide gas to Rotliegend and Carboniferous reservoirs.

Scremerston coals: a ‘new’ source rock in the Dutch northern offshore

- Wells show increase in coal content in Scremerston Fm towards the N (fig. 4).
- 23 m coal in 39/07-1, 30 m in A09-01.
- Coals coincide with high contrast seismic facies in well 39/07-1.
- Oil shows in the A quadrant may be linked to intra-Zechstein source rocks.
- Lower Carboniferous Scremerston coals are a promising source rock for gas in the A, B, E and F quadrants (see below).
- The Lower Jurassic Posidonia shale is a proven oil source rock in the Central Graben.
- The Westphalian may be present in the Step and Central Graben.

Yoredale Fm and Klaverbank Fm (Lower Carboniferous) also contain coal up to 7.5 m encountered in wells.

For questions contact exploration@ebn.nl