Lower Carboniferous
A virtually untested play

Play elements of the Lower Carboniferous plays

The Visean and Namurian deposits in the northern Dutch offshore have significant hydrocarbon potential:

- 20 structures have been identified on the Base Permian Unconformity (BPU) depth map, all 4-way dip or fault dip closures. Provisional P50 GIIPs add up to ~75 BCM (unrisked)
- The Lower Carboniferous clastics play is established in the UK part of the southern North Sea. The UK fields are producing from Namurian and Visean reservoirs

For questions, contact info@nlog.nl or exploration@ebn.nl

Reservoir
- Visean and Namurian reservoir rocks are present throughout the study area
- Abundance and thickness of sands with reservoir quality increase from Breagh (well 42/13-2) towards the northeast

Seal and trap
- Numerous fault and dip closures at BPU level, below Silverpit shales and Zechstein salt, which are proven regional seals
- Presence of intra Lower Carboniferous seal(s) would provide large upside

Source and charge
- Lower Carboniferous Scremerston coals are the most promising source rocks in the northern part of the study area
- In the southern part charge may occur from Lower Carboniferous basinal shales and laterally from Upper Carboniferous Westphalian coals

Figure 1. Diagram illustrating the structural geology and play elements of the Visean and Namurian in the Mid North Sea area. The Elbow Spit Platform is an example of a high, while the North Elbow Low is an example of an overfilled basin (Ter Borgh et al., 2018).

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