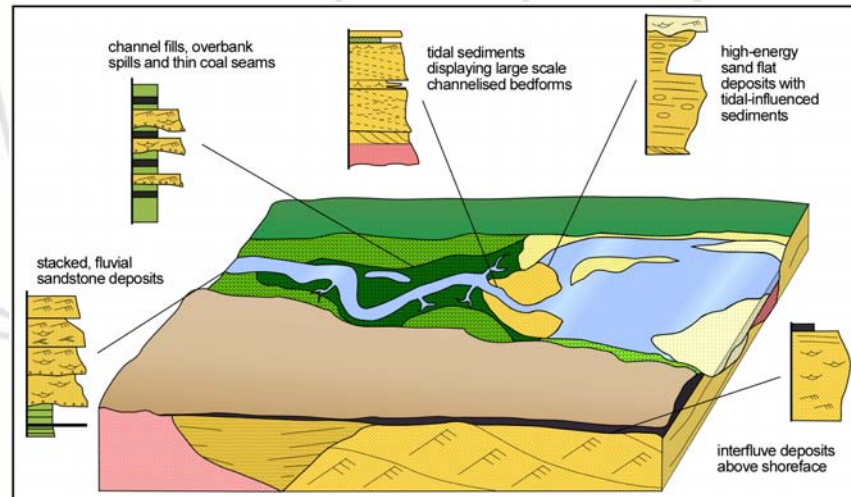


Certain paleoenvironments are especially prone to oil / gas retention; this is the result of their originally well developed porosity and permeability. Deposits of this type, e.g. delta environments, point bars, dunes, beach sediments and reefal structures, that have not been or only slightly cemented and are ideally sealed by natural barriers like clays and cemented strata meet these conditions.



Sediments in delta environments may be prone to provide hydrocarbon source rocks dependent on regional subsidence rates and organic input. As seen in the above illustration, hydrocarbons may then migrate to coarser sandbodies which are ideal reservoir rocks if not cemented at an early or later stage of burial. Ideally, these deposits become sealed by clays or strongly cemented sedimentary units.

Reconstructing paleoenvironments may help to find the right formation within a broad spectrum of facies patterns that emerges to be the most suitable site for oil / gas production. Extant geophysical logs may thus be approved for sedimentological properties like grain textures, porosities / permeabilities. Goniometric measurements can provide information of oriented sedimentary structures and palaeocurrent directions allowing determinations of sandbody size, morphology, orientation and elongation direction, locating directions of thickening and thinning.

Corex offer the following services for this purpose:

- Field mapping
- Core logging
- Thin section analysis
- Geochemical/stable isotope analysis
- Goniometry

