# An Assessment of Potential Reservoir Distribution through Seismic Texture Attribute Facies Classification: A Case Study of the Bilousivksko-Chornukhinska (BC) Field Gas Reservoirs, Ukraine.

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Geological information contained in seismic signals can be unlocked mostly through seismic textural attribute analysis. Seismic stratigraphic texture attributes are used in this project to capture and to categorize attribute expressions into facies classes.

BC field's early Carboniferous reservoirs occur both in shallow marine Visean fluvial sandstones, and in deeper turbiditic Toumaisian sandstones. The two systems are separated by an episode of Visean carbonate deposition.

This paper will discuss how seismic attributes have been used to predict reservoir quality and distribution, since they capture geological features associated with sediment deposition and dispersal. The process presented here is intended to facilitate a faster and improved modelling workflow.

A combination of RMS attribute and variance analysis enables the mapping of the seismo-facies distribution. These attributes were analysed and sculpted using a seismic geobody interpretation process. Structural slices through the volumes reveal channel geometries and their corresponding amplitude characteristics. These attributes were sampled directly into a structural model to generate a 3D facies grid.