

## CORE CONFERENCE ABSTRACTS

GLAUCONITIC SANDSTONE 'H' POOL,  
COUNTRESS AREA

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The Glauconitic Sandstone of southern Alberta is one of the important producers of oil and gas in western Canada. Detailed study of the Glauconitic Sandstone was undertaken to describe its stratigraphy and sedimentologic texture in order to determine its environment of deposition. Mineral composition, grain size analysis, assemblage of sedimentary structures and trace fossils vary across this area; they form the basis for recognizing fluvial environment of this sandstone.

The geometry of the sandstone in the Countess area indicates that oil is trapped in the point bars of fluvial sand. The recognition of fluvial channels and their infilling is of

major importance to oil and gas exploration in this area. The identification of paleo-environments of the Glauconitic Sandstone is based on the recognition of various counterparts in modern fluvial conditions.

An isopach map of the Glauconitic Sandstone to Mississippian interval reveals that the sandstone was laid down on an eroded surface of the underlying Ostracode beds. It is also observed that diagenetic influences are responsible for reducing the porosity and permeability of this sandstone.