

# Petroleum Geology

## **Lab -1- Lithological Interpretation Through logs**

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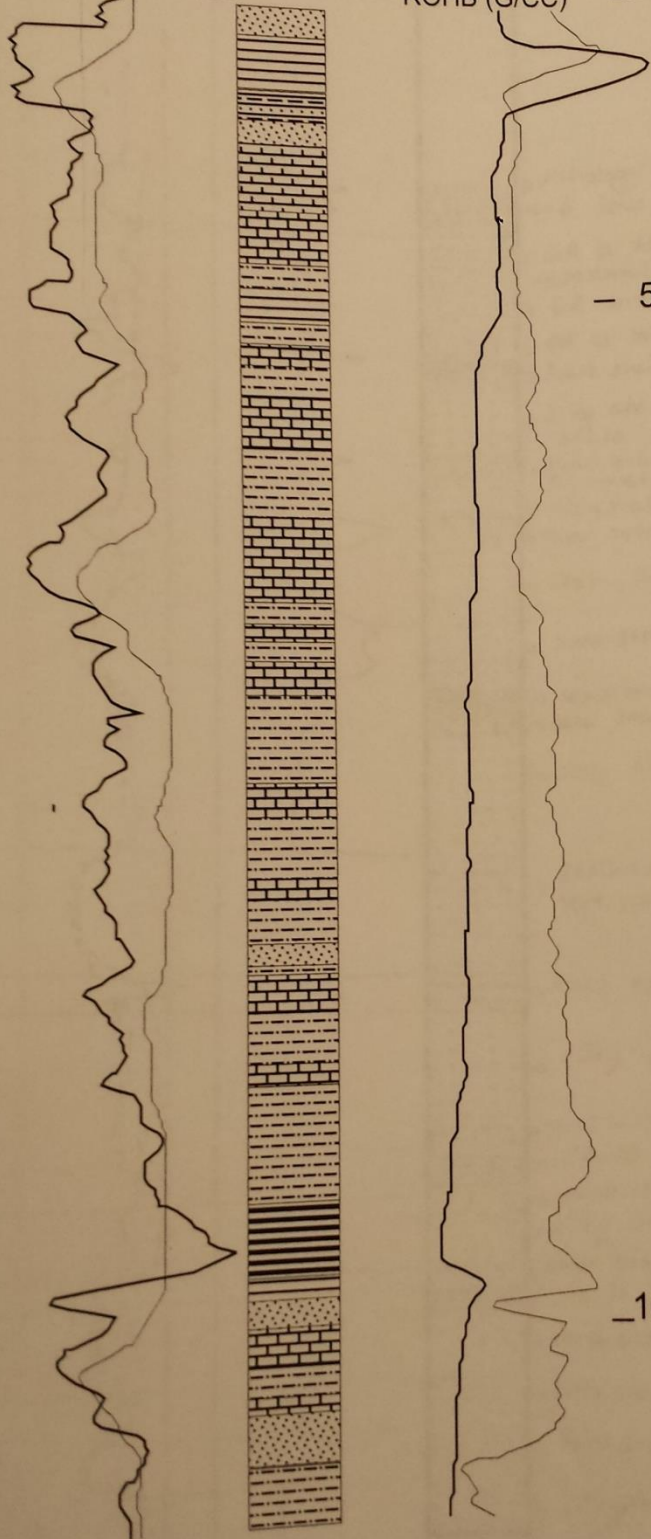
### **Purpose**

Using logs for petroleum exploration is one of the ways in which geologists and petroleum engineers can observe and study the rocks in the subsurface. That is why study logs is important. The first step is the lithological interpretation of the logs. Second studying the vertical and lateral changes will help to establish a stratigraphic framework. These changes can lead to a more accurate correlation and can help identify possible reservoir, source or cap rocks.

### **Instructions:**


1. Read the example log below and understand how you can relate your logs curve to lithology and vertical changes.
2. Using the same legend, draw in pencil a lithological column for another well. This step is extremely important. Remember to put your interpretation in vertical context.


0 GR (API) 150 0  
75 SP (mv) 150 2 Resistivity (OHMM) 40  
ROHB (G/CC) 2.7

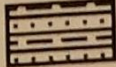



- 50


-1050


 Limestone


 Arenaceous limestone

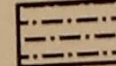
 Argillaceous limestone


 Sandstone

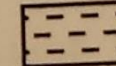
 Calcareous sandstone


 Shale

 Black fissile shale

 Silty shale

 Calcareous shale

 Mudstone

 Paleosol