LIMITATION ET INTERPRÉTATION DES DIAGRAPHIES STANDARDS EN MILIEUX CÔTIERS. EXEMPLE DES DELTAS DE LA CATALOGNE (ESPAGNE).

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Abstract:

Well logging usually is aimed at identifying the lithology of different rock formations and determining some hydro-physical proprieties mainly porosity, permeability and the nature of the fluid they contains. In standards studies, the well logging is performed using conventional probe tools: normal electrical, natural gamma, sonic, temperature and conductivity sondes, among other.

The present study was carried out in coast area characterized by deltaic formations affected by marine intrusion, in such environment the most logs are affected by the high water salinity and these curves are generally omitted in the work. Further more, the geological nature of these deltaic regions imposes an adequate casing well during the drilling (mainly piping) that also restrict the use of these probes.

The main objective of this presentation is to assess some study cases of wells located in shore-intrusion environment where these logging curves can offer useful information. These wells were located in three NW Mediterranean sites: Tordera, Llobregat and Ebre river deltas(Spain).

Key words:

Well logging, seawater intrusion, conductivity log, temperature log, natural gamma ray log, electrical normal logs, caliper and sonic logs.