APPLICATION OF NUMERICAL SIMULATION TO MONITOR VOID RATIO EFFECT ON MIGRATION OF CRUDE OIL IN HORIZONTAL AND HETEROGENEOUS SOIL DEPOSITION

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ABSTRACT

The paper investigates the impact of void ratio on the transport of crude oil in deltaic depositions, the system was express applying numerical modeling and simulation, several experts has monitor the depositions of crude oil in soil and water environment, but they could not monitor their rates of impacts from void ratios in different strata to phreatic beds. The study developed the behaviour of the contaminant at discretazed phase of the transport system through numerical simulations. The derived solution were applied through simulation generated values at different concentration from [0-100m] ranging from 2500.08 - 9.681208, 2500.08 - 9.681208, 2500.08-5.845671, 2500.8-3.924582, 2523.1-2.4, 2500-20.8, the study has express the variation refection on void ratio impact for crude oil transport in the study location.

Keywords: Numerical simulation void ratio crude oil and heterogeneous soil.