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The Effect of DC Electrical Potential on Enhancing Sandstone Reservoir Permeability and Oil Recovery

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Abstra

The mer bility on
sandstor studies.
Normal a tudies are
condu roduced
brine
spectros nced 180%
with the n reverse
configur s observed
in norma onal oil is
recovere electrolyte
moveme electrode
configuration, formation of colloidal clay suspension and flowing out along with

produced brine is evident. This has resulted in increased pore passage and core permeability, whereas in the reverse configuration, clay structures remained unchanged. The given explanations are supported by ICP-MS and X-ray diffraction results.

Keywords:

clay migration | electrokinetics | electromigration | permeability enhancement