

[Log in](#) | [Register](#)

Journal

[Petroleum Science and Technology](#)Volume 27, 2009 - [Issue 13](#)

A Modified Model for Predicting Permeability Damage due to Oilfield Scale Deposition

[A. S. A. Fadairo](#), [O. Omole](#) & [O. Falode](#)

Pages 1454-1465 | Published online: 22 Jul 2009

- [Download citation](#)
- <https://doi.org/10.1080/10916460802637635>

[Select Language](#) ▼[Translator disclaimer](#)

- [Full Article](#)
- [Figures & data](#)
- [References](#)
- [Citations](#)
- [Metrics](#)
- [Reprints & Permissions](#)
- [Get access](#)

Abstract

Scaling is a major problem in water flooding caused by the mixing of incompatible injected and formation waters. The phenomenon results in precipitation and accumulation of oilfield scale around the well bore after water breakthrough at reduced reservoir pressure. This results in formation damage, which may influence reservoir well bore performance and success of water flood project. This article presents a modified model for predicting permeability damage due to oilfield scale precipitation at different operational and reservoir/brine parameters. The key operational and reservoir parameters that influence the magnitude of flow impairment by scale deposition are identified through the modification.

Keywords: [formation damage](#), [modeling](#), [oilfield scaler](#), [water flooding](#)**[Purchase](#)** *[Save for later](#)
OnlineArticle Purchase **24 hours to view or download: USD 50.00** [Add to cart](#)

* Local tax will be added as applicable

People also read

Article

[The Effect of Temperature on Calcium Carbonate Scale Formation in Iranian Oil Reservoirs Using OLI ScaleChem Software](#)

M. Amiri et al.

Petroleum Science and Technology

Volume 30, 2012 - Issue 5

Published online: 12 Jan 2012