

Author's Accepted Manuscript

Pore-Scale Simulation of Flow of CO₂ and Brine in
Reconstructed and Actual 3D Rock Cores

Pejman Tahmasebi, Muhammad Sahimi, Amir H.
Kohanpur, Albert Valocchi



www.elsevier.com/locate/petrol

PII: S0920-4105(16)31362-6
DOI: <http://dx.doi.org/10.1016/j.petrol.2016.12.031>
Reference: PETROL3800

To appear in: *Journal of Petroleum Science and Engineering*

Received date: 28 February 2016
Accepted date: 21 December 2016

Cite this article as: Pejman Tahmasebi, Muhammad Sahimi, Amir H. Kohanpu and Albert Valocchi, Pore-Scale Simulation of Flow of CO₂ and Brine in Reconstructed and Actual 3D Rock Cores, *Journal of Petroleum Science and Engineering*, <http://dx.doi.org/10.1016/j.petrol.2016.12.031>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Pore-Scale Simulation of Flow of CO₂ and Brine in Reconstructed and Actual 3D Rock Cores

Pejman Tahmasebi¹, Muhammad Sahimi^{2*}, Amir H. Kohanpur³, Albert Valocchi^{3,4}

¹Department of Petroleum Engineering, University of Wyoming, Laramie, WY 82071, USA.

²Mork Family Department of Chemical Engineering and Materials Science, University of Southern California, Los Angeles, CA 90089-1211, USA.

³Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801, USA.

⁴International Institute for Carbon Neutral Energy Research (WPI-I2CNER), Kyushu University, 744 Moto-oka, Nishi-ku, Fukuoka 819-0395, Japan

*Corresponding author: moe@usc.edu

Abstract

Sequestration of CO₂ in deep underground saline formations is currently under study as a practical approach for reducing emissions of CO₂ from power plants into the atmosphere, thereby helping to mitigate problems of climate change and global warming. Such formations

Download English Version:

<https://daneshyari.com/en/article/5484180>

Download Persian Version:

<https://daneshyari.com/article/5484180>

[Daneshyari.com](https://daneshyari.com)