

# **Temperature modeling for wellbore circulation and shut-in with application in vertical geothermal wells**

*Mostafa Magdy Elsayed Abdelhafiz , Joachim Oppelt; Luiz Hegele*

## **Abstract**

<https://www.sciencedirect.com/science/article/abs/pii/S092041052100320X>

*Journal of Petroleum Science and Engineering 2021, March*