عنوان مقاله:

Numerical SimulationandImprovement of Whitson Method for Compositional Gradient Calculationsin Petroleum Reservoirs

نویسندگان:

Mohammad HosseinSedaghat - *Department of Chemical and Petroleum Engineering,Sharif University of Technology, Tehran, Iran*

Ahmad Daliri - *Department of Chemical and Petroleum Engineering,Sharif University of Technology, Tehran, Iran*

Mohsen Masihi - *Department of Chemical and Petroleum Engineering,Sharif University of Technology, Tehran, Iran*

Mohammad Hossein Ghazanfari - *Department of Chemical and Petroleum Engineering,Sharif University of Technology, Tehran, Iran*

خلاصه مقاله:

Thisstudyworksonenhance theaccuracy ofWhitsonalgorithm, applied for calculating compositionalchanges in petroleum reservoirs. These improvementsare implementedby choosingthe proper calculated value ofthe parameter λ andusing the more proper way to choose the pressureestimation in algorithm. In thismethod both liquid and gas phase calculations use just one reference point in calculations. Reference point is a point where certain compositions and pressure are set for a certain depth. Resultsof this improved numerical algorithmare matched well withthe results of commercialsoftwarethat validate this method. Results showthat calculations would be more accurate by inserting some modifications into algorithm

کلمات کلیدی:

Composition gradient - Numerical simulation -Chemical ، Gravity Equilibrium - Improved Whitson algorithm - Heavy oil

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