

Review Form 1.7

Journal Name:	Journal of Energy Research and Reviews
Manuscript Number:	Ms_JENRR_115846
Title of the Manuscript:	Dynamic Simulation of the Stability of Annular Flows in Gas Wells
Type of the Article	Original Research Article

Review Form 1.7

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1. Yes, the manuscript is important for scientific community. This study investigates multiphase gas-liquid annular flow in gas wells, and its significance lies in enhancing understanding of multiphase flow behaviours. The results aid in optimizing gas well performance.</p> <p>2. Yes, the title is suitable.</p> <p>3. The abstract is comprehensive. However, it would be beneficial to add one or two sentences to emphasize the significance of this study.</p> <p>4. Yes, the subsections and structure of the manuscript are appropriate. However, some subtitle numbers are missing in section 2.</p> <p>5. Yes.</p> <p>6. All references cited in this article were published before 2018. It is recommended that the authors include some more articles published within the last 5 years as references.</p> <p>7. In the Introduction section, specifically in the first paragraph (5th line to 8th line), the authors mentioned that “The consequence of a sudden change in the flow regime especially when the gas velocity drops is usually negative, thus problems such as liquid loading and flow reliability at the well head may be some of the major issues encountered when a sudden transition in flow regime occurs [references needed]”. It would be helpful to add references here to emphasize the influence caused by the sudden transition in flow regime. For example, the snap-off phenomenon (droplets/bubbles caused by slug flow) can occur during this transition process, which has a negative influence on the final recovery. Please refer to the following suggested references.</p> <p>(1) Jia Yao and John Oakey, Geometrically-mediated snap-off of water-in-oil emulsion droplets in microfluidic flow focusing devices, <i>J Oil Gas Petrochem Sci.</i> 2018, 1(2): 42–46. DOI:10.30881/jogps.00009</p> <p>(2) Guihe Li and Jia Yao, Snap-Off during Imbibition in Porous Media: Mechanisms, Influencing Factors, and Impacts, <i>Eng</i> 2023, 4(4), 2896-2925. https://doi.org/10.3390/eng4040163</p> <p>8. In the Introduction section, it would be beneficial to add one or two sentences to emphasize the significance of this study in the last paragraph.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>There are some grammar errors that need to be corrected. Please refer to the manuscript for detailed revisions.</p>	
<p>Optional/General comments</p>		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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