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| Book Name: | [**Engineering Research: Perspectives on Recent Advances**](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4680** |
| Title of the Manuscript:  | **Cuttings Removal in Eccentric Geometries: A Comprehensive Review of Hole Cleaning Mechanism, Affecting Parameters, and Assessment** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Improved Oil and Gas Recovery, Vol. 8 (2024)**

[**https://www.smartscitech.com/index.php/IOGR/article/view/1317**](https://www.smartscitech.com/index.php/IOGR/article/view/1317)

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| PART 1: Comments |
|  | Reviewer’s comment | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **The manuscript titled "Cuttings Removal in Eccentric Geometries: A Comprehensive Review of Hole Cleaning Mechanism, Affecting Parameters, and Assessment" is significant for the scientific community as it addresses a critical challenge in drilling operations. The review provides a thorough analysis of hole cleaning mechanisms, which are essential for maintaining efficiency and safety in directional drilling. By synthesizing recent advancements and identifying key influencing factors, this work contributes valuable insights that can guide future research and practical applications in the field. Furthermore, the comprehensive nature of the review enhances our understanding of the complexities involved in cuttings transport, making it a vital resource for both researchers and practitioners in the industry.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes, the title accurately reflects the content and focus of the manuscript. However, an alternative title could be: "Optimizing Hole Cleaning in Eccentric Geometries: A Review of Mechanisms and Influencing Factors."** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | **The abstract is comprehensive and effectively summarizes the key points of the manuscript. No additions or deletions are necessary.** |  |
| **Is the manuscript scientifically, correct? Please write here.**  | **Yes, the manuscript appears to be scientifically correct. The methodologies and findings are well-supported by relevant literature and empirical data.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **The references are sufficient and include recent studies. However, it may be beneficial to include more recent publications from 2024 - 2025 to ensure the manuscript reflects the latest advancements in the field. Please add the following related references:****Jamshidi, E., Kianoush, P., Hosseini, N. et al. Scaling-up dynamic elastic logs to pseudo-static elastic moduli of rocks using a wellbore stability analysis approach in the Marun oilfield, SW Iran. Sci Rep 14, 19094 (2024). https://doi.org/10.1038/s41598-024-69758-w****Saffari, M., Ameri, M., Jahangiri, A. et al. Development of rheological models depending on the time, temperature, and pressure of wellbore cement compositions: a case study of southern Iran's exploratory oilfields. Arab J Geosci 17, 175 (2024). https://doi.org/10.1007/s12517-024-11982-9****Pirhadi, A., Kianoush, P., Varkouhi, S., Shirinabadi, R., Shirazy, A., Shirazi, A., Ebrahimabadi, A (2025) Thermo-poroelastic analysis of drilling fluid pressure and temperature on wellbore stresses in the Mansouri oilfield, SW Iran. Results in Earth Sciences 3, 100061. https://doi.org/10.1016/j.rines.2025.100061****Kianoush, P., Mesgari, F., Jamshidi, E., Gomar, M., Kadkhodaie, A., Varkouhi, S (2024) Investigating the effect of hole size, bottom hole temperature, and composition on cement bonding quality of exploratory wells in Iran. Scientific Reports 14, 29653. https://doi.org/10.1038/s41598-024-81269-2****Khoshmagham, A., Hosseini Alaee, N., Shirinabadi, R., Bangian Tabrizi, A.H., Gholinejad, M., Kianoush, P (2025) Geological characteristics of coal mines in the Zagros Basin of Iran: Unveiling rock mechanical properties and time-dependent behavior. Energy Geoscience 6, 100361. https://doi.org/10.1016/j.engeos.2024.100361****Kianoush, P., Mohammadi, G., Hosseini, S.A., Keshavarz Faraj Khah, N., Afzal, P (2023) ANN-based estimation of pore pressure of hydrocarbon reservoirs—a case study. Arabian Journal of Geosciences 16, 302. https://doi.org/10.1007/s12517-023-11373-6** |  |
| Is the language/English quality of the article suitable for scholarly communications? | The language quality is generally suitable for scholarly communication. Minor grammatical corrections may enhance clarity, but overall, it is well-written |  |
| Optional/General comments | The manuscript is well-structured and provides a valuable contribution to the field of drilling engineering. It would benefit from a thorough proofreading to correct minor typographical errors.**Authors should address the minor grammatical issues and consider incorporating more recent references to strengthen the manuscript further.** |  |

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| **PART 2:**  |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer Details:**

**Pooria Kianoush, Islamic Azad University, Iran**