

Review Form 3

Journal Name:	Biotechnology Journal International
Manuscript Number:	Ms_BJI_125626
Title of the Manuscript:	IMPROVING THE RHEOLOGICAL PROPERTIES OF WATER-BASED DRILLING MUDS USING WASTE GLASS POWDER
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The research explores a relatively under-investigated area, focusing on the effects of waste glass powder on WBDM, which is a significant contribution to both environmental sustainability and drilling technology. The study employs a comprehensive approach by using multiple analytical techniques (FTIR, SEM-EDS, XRD) for characterizing WGP, which strengthens the findings regarding its composition and potential benefits. The systematic investigation of varying concentrations of WGP in WBDM and the thorough rheological testing provide a clear understanding of how WGP affects the mud's properties</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title is suitable</p>	
<p>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.</p>	<p>The abstract is excellent</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript could benefit from improved clarity in some sections. The introduction, while comprehensive, contains lengthy sentences that may confuse readers. It would be helpful to streamline the writing and focus on key points to enhance readability. Discussion of Results: The results section should include more in-depth discussions regarding the implications of the findings. For instance, how do the observed changes in rheological properties with increasing WGP concentration impact actual drilling operations? Elaborating on practical applications and limitations would add value to the research. Environmental Impact Analysis: While the paper briefly mentions the potential environmental benefits of using WGP, a more detailed analysis or discussion on the lifecycle assessment or environmental impact of implementing WGP in drilling muds would be advantageous.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The Manuscript demonstrate a solid foundation in the scientific correctness, as it employs well-established methodologies for characterizing waste glass powder and assessing its impact on the rheological properties of water-based drilling muds. The use of analytical techniques such as FTIR, SEM-EDS and XRD ensures a comprehensive understanding of the material properties, while the experimental design for the rheological testing is appropriate for the objectives outlined. The research explores a relatively under-investigated area, focusing on the effects of waste glass powder on WBDM, which is a significant contribution to both environmental sustainability and drilling technology.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references sufficient and recent</p>	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is suitable for scholarly communications.	
Optional/General comments	The study presents promising findings regarding the use of waste glass powder in enhancing the rheological properties of water-based drilling muds.	

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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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