

Review Form 1.7

Journal Name:	Asian Journal of Chemical Sciences
Manuscript Number:	Ms_AJOCS_97841
Title of the Manuscript:	Profiling the Contamination level and pollution load index of borehole water from Esako West LGA, Edo State, Nigeria
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>6.</p>	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? 	<p>The English language used is understandable and sufficient for most readers to understand the purpose and results of the article.</p>	
<p>Optional/General comments</p>	<p>It is necessary to carry out a scientific bibliographical investigation of the subject, incorporate it into the background, the document must also be organized, and finally more conclusions must be sought from the results and not only present a general conclusion. The references must be more and from the last years</p> <p>Modeling was applied to the keywords. At work there is no modeling What do you mean by high melting and boiling points? Up to 35 parameters can be measured to determine the quality of water. This depends on the use and type of water. In the case of drinking water, microbiological parameters are also determined. If in previous studies it has been detected that the main contamination factors are microbiologists, the study should be aimed at detecting the main microbiological physicochemical parameters and heavy metals because they are groundwater. It is understood that the resources and infrastructure for this type of analysis are limited in Nigeria however does not justify proposing such limited research. What are the standard methods of collecting and analyzing water samples. Depending on which dependency Local norms or international standards. The pH determination has to be done on site, not in the laboratory, since conditions change if sampling is not done properly to preserve the parameters of when the sample was collected. If it is done in the laboratory, the sample conservation procedure must be indicated. In the conductivity the same comment that was made for the pH It would be necessary to analyze if it is the best methodology to determine total dissolved solids The analysis should be carried out in an environment isolated from the surrounding environment to avoid overestimating the CO2 since part of it comes from the surrounding atmosphere and is not typical of the sample.</p>	

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	<p>It is necessary to describe what AAS means. atomic absorption spectroscopy The table does not show the average values or the standard deviation In 5 of the 8 wells, the PLI is greater than 1 and the other 3 are 1, so it should be considered that all the wells have a degree of contamination. The average concentration is above the WHO and NF standards The pH parameter is interpreted if the value is below the WHO and NF standards it does not mean that it is good, in fact in this case it means that the waters are very acidic and are far outside the permissible range of 6.8 to 9 considered or slightly been or moderately alkaline. Nitrogen may also be associated with excessive use of NPK fertilizers. Chlorine can become dangerous due to the by-products that it can generate in the presence of other chemical substances. Iron and manganese are not considered cancer precursor heavy metals. The heavy metals that are most evaluated in groundwater are: arsenic, cadmium, cobalt, chromium, copper, mercury, manganese, nickel, lead, tin and thallium. They are considered carcinogenic and mutagenic. The pH parameter is interpreted. If the value is below the OS and NF standards, it does not mean that it is good, in fact, in this case it means that the waters are very acidic and are far outside the permissible range of 6.8 to 9 considered or slightly been or moderately alkaline. With the results presented, it is very risky to affirm that heavy metals are altering the health of the population, since the following metals should have been evaluated: arsenic, cadmium, cobalt, chromium, copper, mercury, manganese, nickel, lead, tin and thallium and analyze its concentration and oxidation state. The conclusions are correct; however, they must be supported with the results obtained, and the results should also be discussed or compared with those of other authors who have worked in areas similar to the study site. 7. Of the 41 references consulted, 31 of them have been published for more than 10 years, it would be necessary to look for a more up-to-date bibliography.</p>	
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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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