Response to Referees' Queries (RC1-DWES)

Referee's Queries	Authors' Responses
RC1	
1. - A location figure is missing, indicating the specific location of the study area (i.e., boreholes, Deli foods, OK foods, Lagos lagoon, fertilizer company (for Nitrate concentrations), etc.	These have been provided in Figure 1.
2. - The description of the aquifer characteristics is a must. Does it correspond to a phreatic, semi-confined or confined aquifer? Please provide the lithology of the study area, including the depth of the boreholes used during the research. Do the boreholes correspond to the same aquifer layer?	Aquifer characteristics of study areas has been provided as obtained from Lagos State water regulatory commission together with the lithology information stated thus "The aquifer in all the study areas was characterized as unconfined under saturated zone which is coastal plain sand comprising of silt, clay and sand (Akinlalu et al. 2018) while the respective borehole depths for Deli foods, OK foods, Oshodi and Agege community boreholes were 117, 134, 109 and 143 m (www.lswrc.lagosstate.gov.ng)."
3. - Has any vulnerability assessment been conducted in the study area? It may provide more insights for the analysis of the present results.	Results of previous research works involving groundwater quality and vulnerability assessment have been presented in Table 1 to shed more lights on the present study.
4. - How many samples were extracted?	Total number of samples extracted was four (4). This has been specified already in Samples collection sub-section thus "A total of four samples were collected from the locations."
5. -The sampling protocol was too limited. Seasonal behavior should have addressed in order to establish a groundwater assessment. This issue really constraints the scope of this study.	We totally in agreement with the reviewer in this regard. Seasonal behaviour in terms of both rainy (wet) and sunny (dry) seasons should have been considered to expand the scope of the study. Thereby, expanding results discussion in terms of comparison. However, samples collection was executed during the rainy season as specified thus "This sample collection exercise was done during rainy season (May 2018) and …………". Our future research works will put that into consideration.
6. - A wrong type of plots has been selected by the authors. Box plots, or a similar method, must be used for the results assessment. The number of samples is missing.	The wrong type of plots have been deleted and replaced with Table 1 comprising of all the information earlier presented in figures and number of samples examined.
7. - The spatial distribution of the sampling points, including the location of facilities of interest, avoids conducting a proper analysis of the results.	All these information has been provided under the "samples collection" and "materials and methodology sections" thus "All chemicals and reagents (sodium hydroxide, distilled water, buffer solution, indicators, silver nitrate, sodium trioxocarbonate IV, ethylenediamminetetraacetic acid (EDTA), bleaching powder, potassium iodide, sodium thiosulphate solution, manganese sulphate and hydrochloric acid) used for

	laboratory analysis were of analytical grade and purchased from TopJ Scientific in Ado-Ekiti, Ekiti State, Nigeria. Laboratory analysis was conducted inside the waste water treatment laboratory of Afe Babalola University, Ado-Ekiti, Ekiti state." and "Two litres of groundwater samples were collected from boreholes of Deli foods (IW1) and OK foods (IW2). Also, groundwater samples were collected from Oshodi and Agege community boreholes, each located at 40 km away from Deli foods (RW1) and OK foods (RW2) respectively. A total of four samples were collected from the locations."
8. -Were the samples extracted during rainy season? No information has been provided in order to support the statement related to Nitrate (the authors say: The alkalinity of water sample (IW2) may be attributed to the presence of bicarbonates, part of essential raw materials for production, lost into the soil and percolates into the underground soil via rain water).	Thanks very much for this notification. This information was formerly presented technically in the manuscript where the period of collection was indicated to be rainy season period (May 2018). However, it has been signified that the period of sample collection was rainy season. This was used to validate the discussion of result identified.
9. Local groundwater flow information should have been considered in this study to make it valid. No information regarding to the lithology of the aquifer and potential geogenic contamination of the groundwater has been provided, which limits the assessment and conclusions of this study. Although the Pearson0s correlation for some parameters seems to be conclusive, the data analysis and the methodology is limited.	Information regarding the aquifer lithology has been provided under the "study area" section to make the local groundwater flow information available thus: "The aquifer in all the study areas was characterized as unconfined under saturated zone which is coastal plain sand comprising of silt, clay and sand (Akinlalu et al. 2018) while the respective borehole depths for Deli foods, OK foods, Oshodi and Agege community boreholes were 117, 134, 109 and 143 m".