

Fig. 7. BOD concentration according to Libyan specification

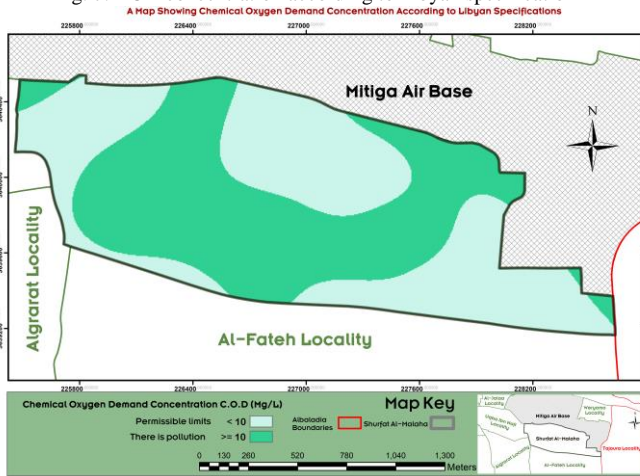


Fig. 8. COD concentration according to Libyan specification

VI. CONCLUSION

The study showed a set of results through achieving the objectives of this study, as follows:-

1. The ability of geographic information systems to study, evaluate and analyze the characteristics of the water situation, produce accurate maps that show pollution rates, and establish geographical databases for the chemical properties of drinking water in the study area.

2. The groundwater in this area has been contaminated by black well water, which is widely spread in the study area, where it was observed that the concentration of some elements that represent the pollution resulting from sewage water, the concentration of both the BOD and the COD as well as the presence of a high concentration of nitrates NO_3 , where the permissible limit has been exceeded. making it unfit for use and issuing a warning an environmental catastrophe threatens the health of the population.

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