

TITLE: MICROBIOLOGICAL QUALITY OF WATER AND GEOREFERENCING OF SPRINGS AND MINES USED BY THE POPULATION FROM DIVINÓPOLIS MG

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Summary

The water used for human consumption requires the knowledge of the microbiological and physico-chemical conditions in order to assure users and to the competent institutions reliable informations about its potability or possibilities of use. In the city of Divinópolis (MG) many residents have intensified the use of volumes of water from mines or springs especially because of the drought recorded in late 2014 without proper treatment and whose information regarding the quality are non-existent or outdated . This study aimed to evaluate the microbiological quality and chemical physical aspects of water samples collected in 4 collective alternatives (SAC`s) located in Divinópolis MG and used by the population for their own use without any forms of prior treatment. Sampling was carried out in periods of drought and periods between the rainiest months of the year, despite the reduction in average historical levels of rainfall in the last rainy season. Of the four SAC's studied CSU (Social Urban Center - Interlagos Neighborhood), Canto da Mina (Niterói Neighborhood) Mina Bela Vista (Bela Vista Neighborhood) and Mina do Baiano (Belvedere Neighborhood) inappropriate conditions beyond of the potability patterns were observed for the CSU and Mina do Baiano as well as greater diversity of total heterotrophics evaluated in both stations and substantial distortions in pH and turbidity. For the other sources the values found were within the standards set by law 2914/11. It was also proven that prior boil the samples was effective as in the reducing total heterotrophic as in the elimination of fecal contamination indicator. In addition all the SAC's analyzed were cataloged and georeferenced. The data collected in this study are available in *meioambientedivinopolis.blogspot.com.br* and may be useful in explanation to the population and decision-making by the competent authorities reflecting improving in the quality of life of residents in addition potential increment of the new safe sources water supply for the community.

Keywords: Water, microbial quality, SAC's.

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