



Online Perspectives Journal: Exact & Engineering
Proceedings of the 7th International Congress on Scientific Knowledge
6th Research & Development PROVIC/PIBIC
Vol. 11, Issue 33, Supplement, 2021

Study of the water quality of shallow wells in the municipality of Campos dos Goytacazes, RJ

Zélia Maria Peixoto Chrispim¹, Matheus Rangel da Silva², Maria da Gloria Alves³, Lyndemberg Campelo Correia⁴

(1) Adviser Researcher - Research Laboratory in Management and Technologies in Civil Construction - GETECC/ISECENSA- Civil Engineering Course; (2) Scientific Initiation Volunteer Students of PROVIC/ISECENSA - Civil Engineering Course; (3) Collaborating Professor - Laboratory of LECIV- UENF; (4) Collaborating Professor - Laboratory of do LABHIT – IFES. CENSA Higher Education Institutes – ISECENSA, 139, Salvador Correa Street, Campos dos Goytacazes, RJ, Brazil

Groundwater is an important source of supply, is available in almost all regions of the Earth, constituting an important natural resource. In addition, having knowledge of this resource in terms of quality and quantity is of paramount importance, as these waters are often used for human supply, for irrigation in rural areas and for industrial purposes. In this context, the North Fluminense region, especially the municipality of Campos dos Goytacazes, has been demanding more and more for the use of water resources, due to the population and business increase, motivated, above all, by the huge undertaking that is the Açú port complex, installed in the neighboring municipality, São João da Barra. This reality points to the relevance of developing work that will contribute to a better knowledge of groundwater. This research aims to contribute to a better knowledge of the water quality of the shallow free aquifers in the municipality of Campos dos Goytacazes. As for the methodology, the following steps will be carried out: collection of bibliographic and documentary data, such as conference proceedings, books, ordinance, laws, articles, theses, dissertations, and others; literature review; selection of physicochemical data from existing shallow wells; comparison of physical-chemical parameters with the maximum values allowed with Consolidation Ordinance N°. 5 established by the Ministry of Health; map creation; and elaboration of table and graphs. It is expected with this research to produce and make available information that can contribute to the sustainable management of underground water resources in the municipality of Campos dos Goytacazes.

Keywords: Campos dos Goytacazes; shallow aquifers; quality.

Supported by: ISECENSA; UENF.