

## **ALTERNATIVES FOR THE WATER SUPPLY OF THE TOWN OF BRAGANÇA (NE PARA, BRAZIL)**

1AMORIM, H., 2SOUZA, A.M.M., 1RAMOS, J.F.F. 1Centro de Geociências da UFPA, Belém, Brazil; 2Companhia de Pesquisas de Recursos Minerais (CPRM), Belém, Brazil.

Bragança, a population of approximately 87,000 inhabitants, is an old urban center with obvious health, environmental and life quality problems related to the lack of an appropriate water supply system. The sanitation company of the State, which provides the water supply, dams up the water of the Chumucui creek, and then it undergoes a treatment process before the distribution for the community. In spite of this, some households use this water only for washing. For the drinking and cooking the needy population go for alternatives such as the shallow pits, Amazonas type, from which the water is frequently unsuitable for the consumption due to high nitrate contents and the presence of pathogenic microorganisms. It is common procedure the drilling of shallow water wells which produce water of higher chemical and physico-chemical quality. They are, however, drilled by non-technical personal lacking knowledge of the hydrological characteristics of the aquifers. This results in cases of contamination and misuse of the groundwater reserves. Alternatively, it is suggested for the water supply of Bragança, the drilling of deeper wells, of approximately 120 m, that would pump water stored in the rocks of the Barreiras Group, in accordance with the national technical norms.