GROUNDWATER QUALITY ANALYSIS REPORT

Kampong Cham - Cheung Prey - Trapeang Kor (87F)

Trapeang Kor is located in the district of Cheung Prey. The population of this commune is approximately 5747 (2004). Groundwater sample collection occurred in March 2008 and consisted of the sampling of 10 tube wells throughout the commune. The attached figure presents the location of Trapeang Kor within Kampong Cham as well as groundwater sample locations and exceedances of health-impacting contaminants (when applicable).

Groundwater Quality Rating

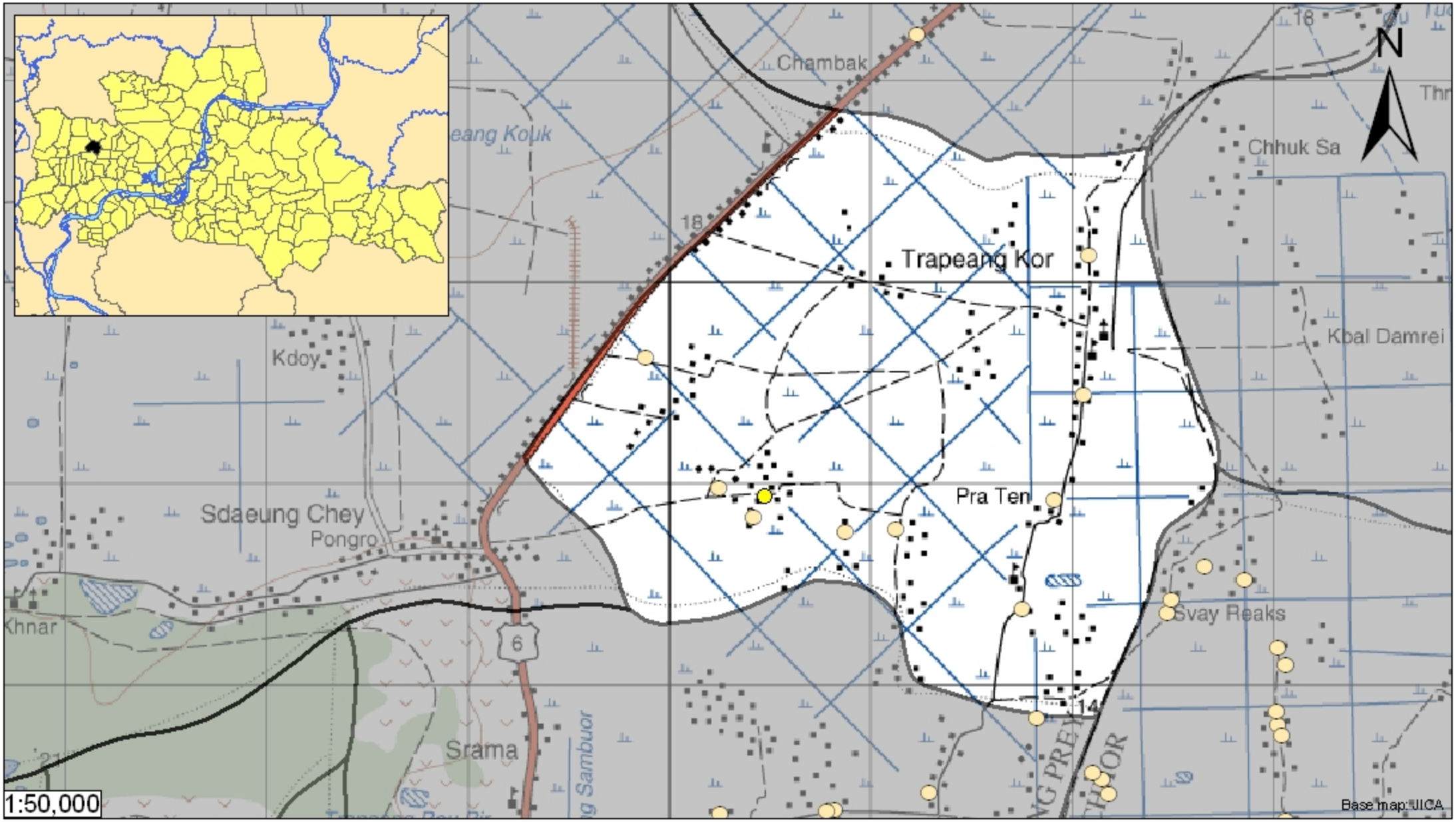
The groundwater quality rating for Trapeang Kor is 87F. Therefore, the general safety of deep aquifer groundwater is good and the aesthetic quality of the water is good, according to the contaminants measured and samples collected. The following two sections describe all major health and aesthetic contaminants that exceeded drinking water standards in at least one sample within the commune.

Contaminants of Potential Concern – Health

Fluoride - Elevated concentrations of Fluoride were observed within the commune. The estimated probability of encountering unacceptable concentrations of Fluoride (>1.5 mg/L) in tube wells is 17%, based on the observed data. At concentrations greater than 1.5 mg/L, Fluoride can cause dental fluorosis and at concentrations greater than 4 mg/L, skeletal fluorosis can occur.

Contaminants of Potential Concern – Aesthetic

Hardness - Elevated levels of Hardness were observed within the commune. The estimated probability of encountering potentially unacceptable levels of Hardness (>500 mg/L) in tube wells is 41%, based on the observed data. Elevated hardness levels impact the effectiveness of soaps and detergents and can cause scaling on pipes and pans. Contrary to common belief, there is no relationship between consumption of hard water and urinary tract problems and kidney stones.



No Exceedance

Arsenic

Manganese

Fluoride

Nitrate

Commune Boundary

Provincial Boundary

Locations exceeding the Cambodian water quality standards for major health-impacting contaminants have been colour-coded and arranged such that they do not overlap.

Tube Well Sample Locations and Health-Based Exceedances

Trapeang Kor - Cheung Prey - Kampong Cham - Cambodia

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