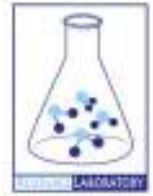




# **GROUNDWATER QUALITY ANALYSIS REPORT**

## ***Kampong Chnang - Chol Kiri - Prey Kri (N/A)***



Prey Kri is located in the district of Chol Kiri. The population of this commune is approximately 6960 (2004). Groundwater sample collection occurred in June 2010 and consisted of the sampling of 2 tube wells throughout the commune. The attached figure presents the location of Prey Kri within Kampong Chnang as well as groundwater sample locations and exceedances of health-impacting contaminants (when applicable).

### **Groundwater Quality Rating**

The groundwater quality rating for Prey Kri is N/A. Therefore, the general safety of deep aquifer groundwater is extremely poor and the aesthetic quality of the water is poor, 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.

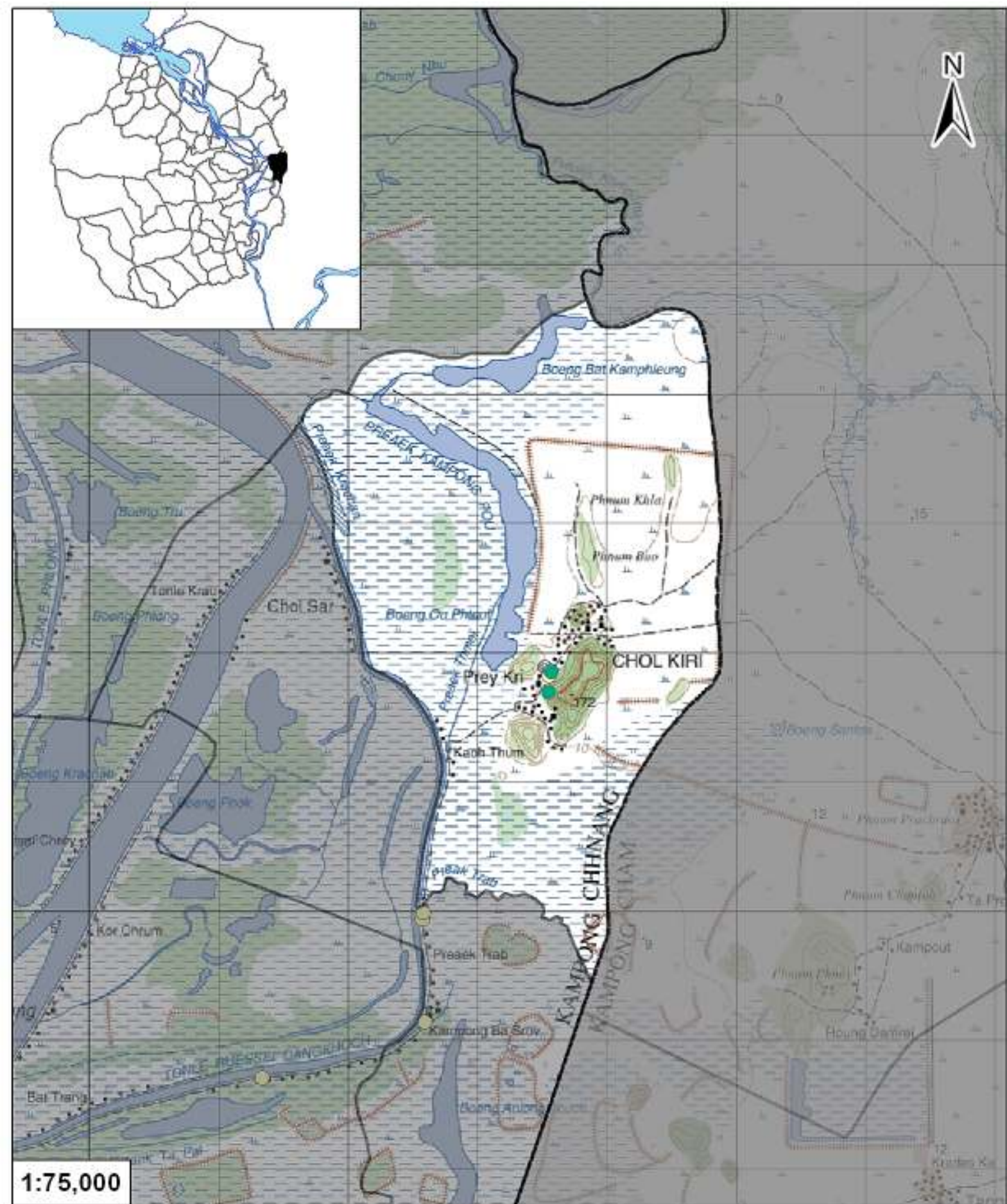
### **Contaminants of Potential Concern – Health**

Nitrate - Elevated concentrations of Nitrate were observed within the commune. The estimated probability of encountering unacceptable concentrations of Nitrate (>50 mg/L) in tube wells is 1%, based on the observed data. Short-term exposure to elevated concentrations can cause blue-baby syndrome in infants.

### **Contaminants of Potential Concern – Aesthetic**

Turbidity - Elevated levels of Turbidity were observed within the commune. The estimated probability of encountering potentially unacceptable levels of Turbidity (>20 ntu) in tube wells is 1%, based on the observed data. Turbid or cloudy water appears unpleasant to the eye and is more likely have an unpleasant taste or odor. Turbidity can be reduced by filtration.

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 1%, 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.



- Arsenic
  - Manganese
  - Fluoride
  - Nitrate
  - No Exceedance
  - Commune Boundary
  - Provincial Boundary
- Locations exceeding the Cambodian water quality standards for major health impacting contaminants have been color-coded and arranged such that they do not overlap

## Tube Well Sample Locations and Health-Based Exceedances

Prey Kri - Chol Kiri - Kampong Chhnang - Cambodia

Resource Development International - Cambodia  
[www.rdic.org](http://www.rdic.org)  
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