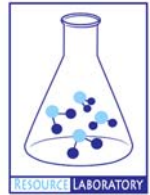




# **GROUNDWATER QUALITY ANALYSIS REPORT**

## ***Kampong Cham - Batheay - Sandaek (94C)***



Sandaek is located in the district of Batheay. The population of this commune is approximately 9845 (2004). Groundwater sample collection occurred in March 2008 and consisted of the sampling of 13 tube wells throughout the commune. The attached figure presents the location of Sandaek 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 Sandaek is 94C. Therefore, the general safety of deep aquifer groundwater is very good and the aesthetic quality of the water is excellent, 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.

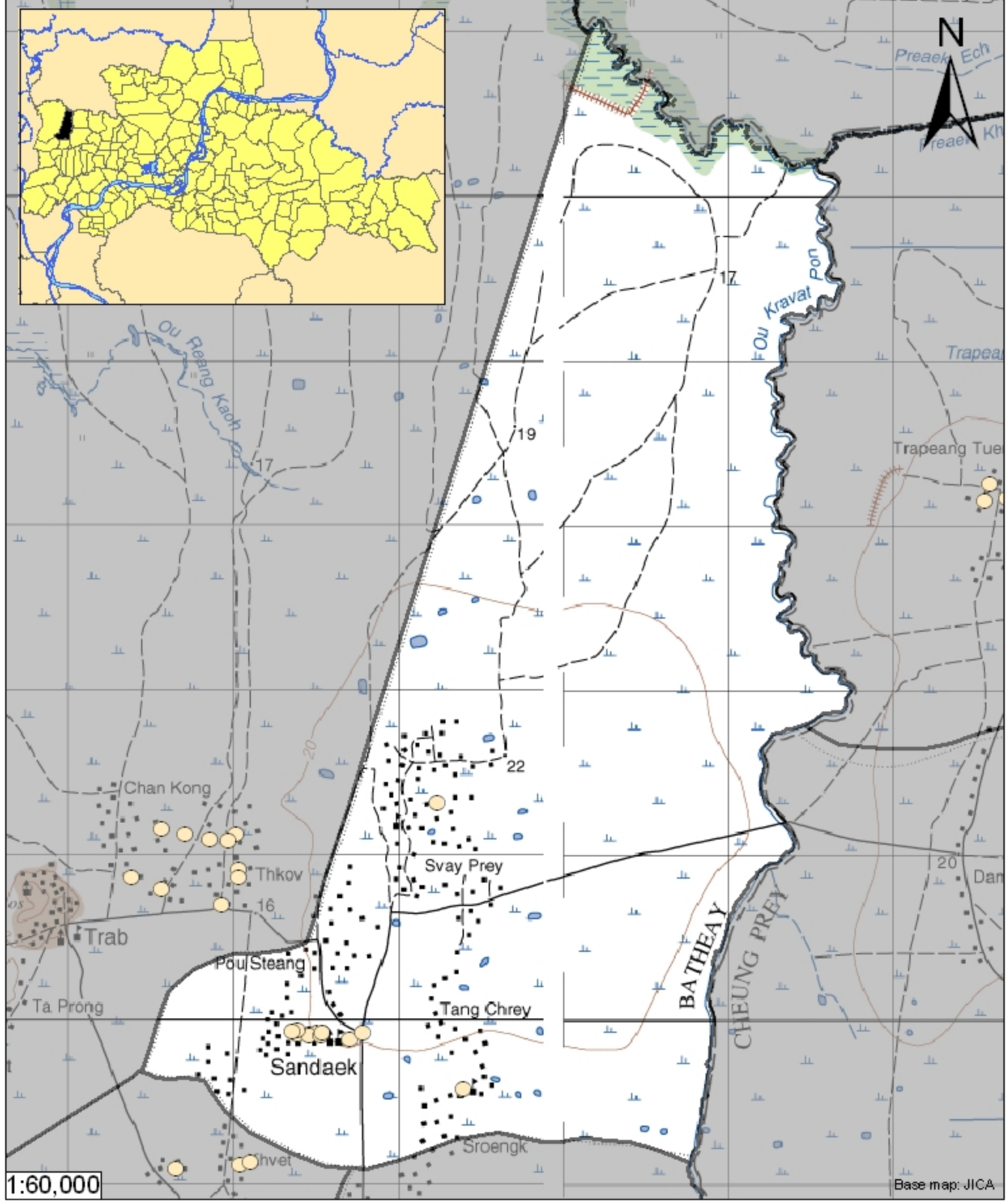
### **Contaminants of Potential Concern – Health**

No health-impacting contaminants of concern were observed within this commune.

### **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 4%, 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 11%, 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.



1:60,000

Base map: JICA

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

## Tube Well Sample Locations and Health-Based Exceedances

*Sandaek - Batheay - Kampong Cham - Cambodia*

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