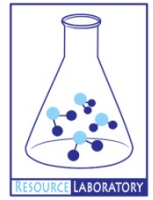




# **GROUNDWATER QUALITY ANALYSIS REPORT**

## ***Prey Veng - Preah Sdach - Angkor Reach (95A)***



Angkor Reach is located in the district of Preah Sdach. The population of this commune is approximately 9575 (2004). Groundwater sample collection occurred in March 2007 and consisted of the sampling of 20 tube wells throughout the commune. The attached figure presents the location of Angkor Reach within Prey Veng as well as groundwater sample locations and exceedances of health-impacting contaminants (when applicable).

### **Groundwater Quality Rating**

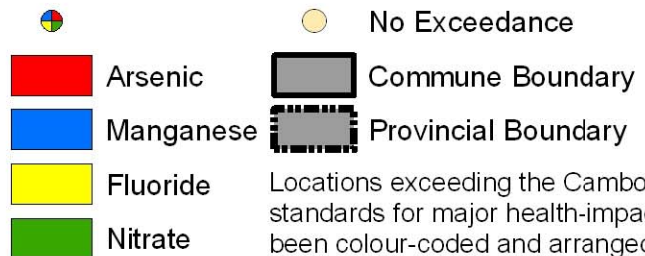
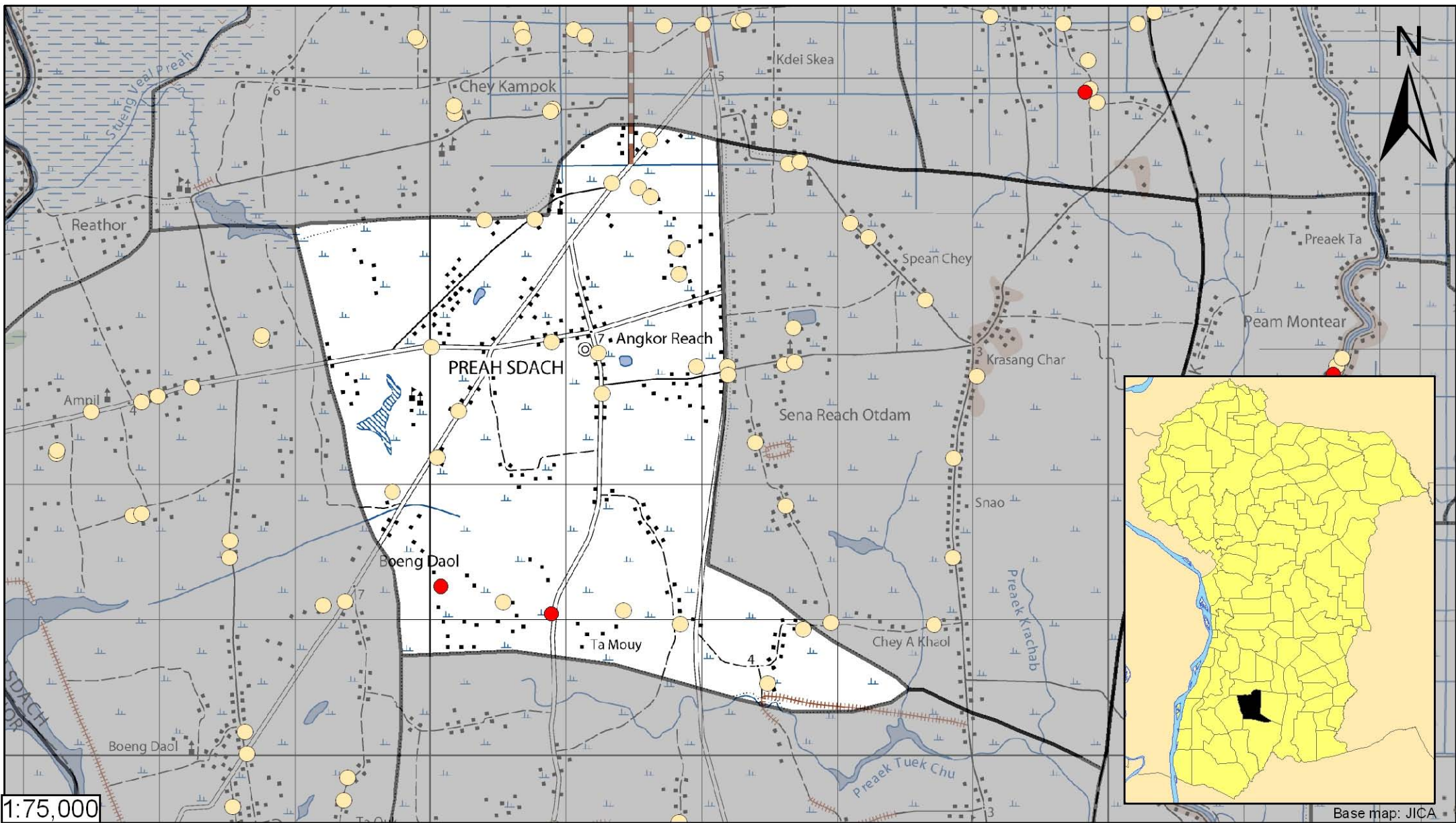
The groundwater quality rating for Angkor Reach is 95A. Therefore, the general safety of deep aquifer groundwater is excellent and the aesthetic quality of the water is excellent, according to the contaminants measured and samples collected. The following two sections describe all major health and aesthetic contaminants that exceeded drinking water standards in at least one sample within the commune.

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

Arsenic - Elevated concentrations of Arsenic were observed within the commune. The estimated probability of encountering unacceptable concentrations of Arsenic (>50 ppb) in tube wells is 1%, based on the observed data. Long-term (5 to 10 year) exposure to elevated concentrations of Arsenic can cause arsenicosis (debilitating skin disease), increased risks of contracting cancer, as well as other negative health impacts.

### **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 8%, 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.



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

Angkor Reach - Preah Sdach-Prey Veang - Cambodia