



GROUNDWATER QUALITY ANALYSIS REPORT

Kandal - Khsach Kandal - Preaek Ampil (40F)



Preaek Ampil is located in the district of Khsach Kandal. The population of this commune is approximately 9472 (2004). Groundwater sample collection occurred in February 2007 and consisted of the sampling of 17 tube wells throughout the commune. The attached figure presents the location of Preaek Ampil within Kandal as well as groundwater sample locations and exceedances of health-impacting contaminants (when applicable).

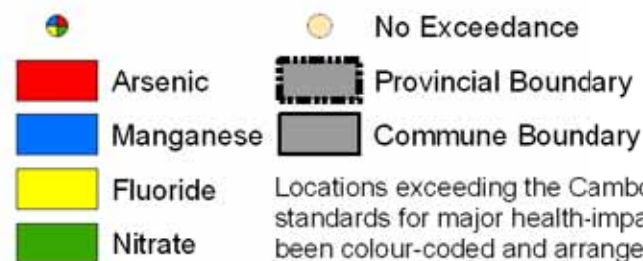
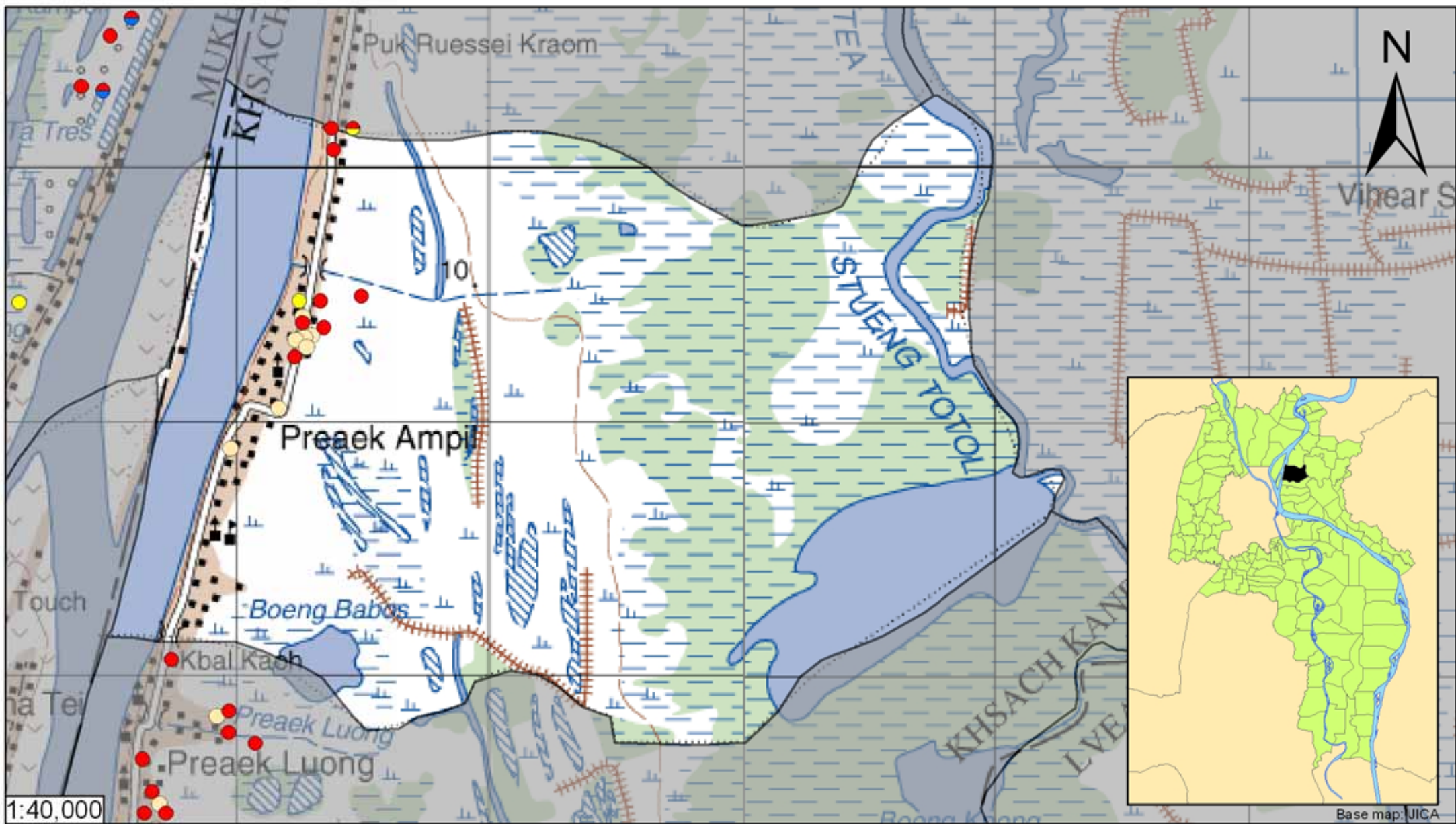
Groundwater Quality Rating

The groundwater quality rating for Preaek Ampil is 40F. 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

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 64%, 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.

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 8%, 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.



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

Preaek Ampil - Khsach Kandal - Kandal - Cambodia

Resource Development International - Cambodia

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