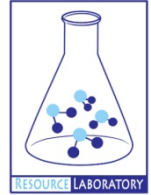




GROUNDWATER QUALITY ANALYSIS REPORT

Prey Veng - Peam Chor - Kaoh Chek (44A)



Kaoh Chek is located in the district of Peam Chor. The population of this commune is approximately 6774 (2004). Groundwater sample collection occurred in April 2007 and consisted of the sampling of 20 tube wells throughout the commune. The attached figure presents the location of Kaoh Chek 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 Kaoh Chek is 44A. Therefore, the general safety of deep aquifer groundwater is poor 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.

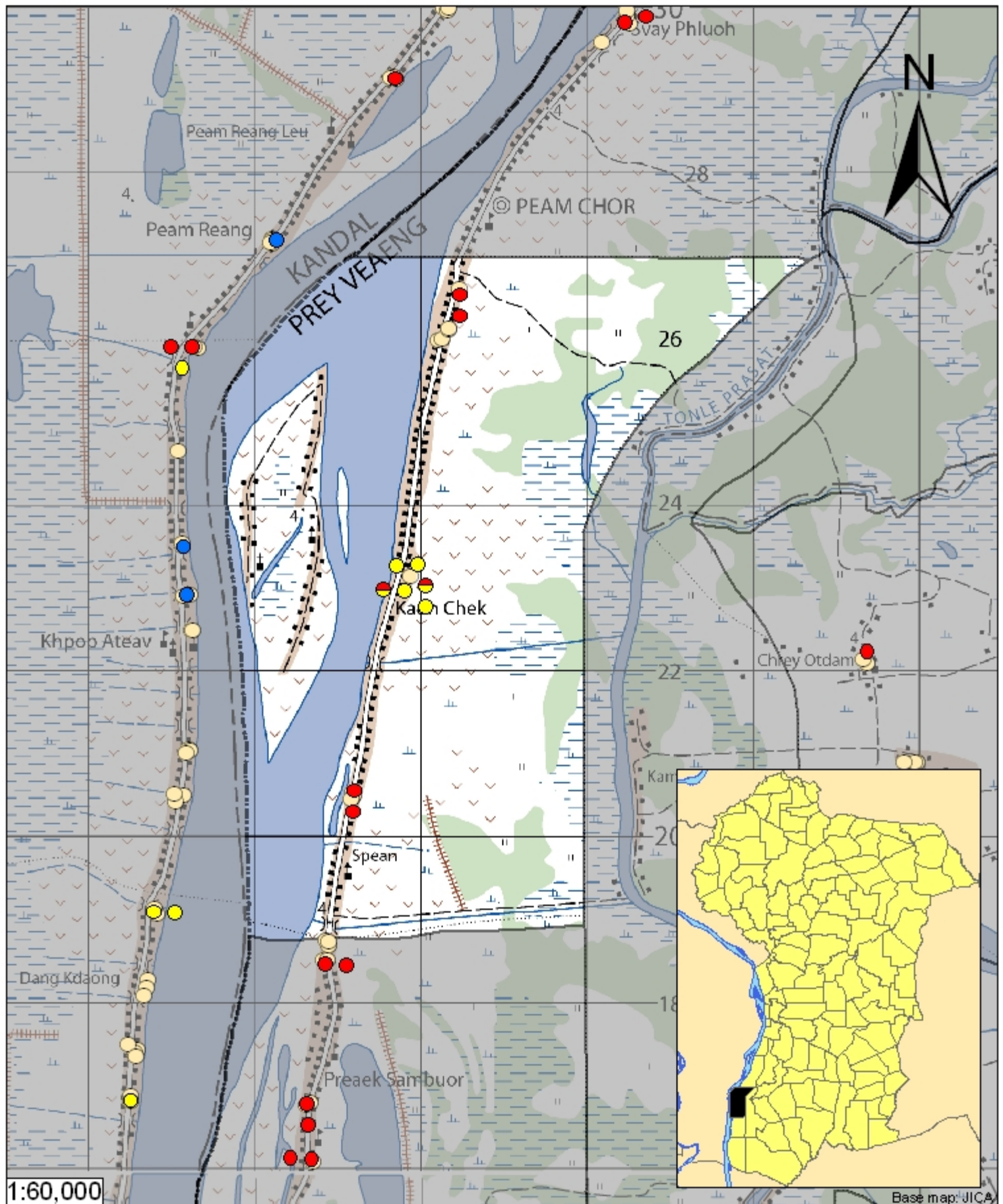
Contaminants of Potential Concern – Health

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 29%, 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 47%, 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

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



- 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
- Province Boundary
- Commune Boundary

Tube Well Sample Locations and Health-Based Exceedances

Kaoh Chek - Peam Chor - Prey Veng - Cambodia

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