



GROUNDWATER QUALITY ANALYSIS REPORT

Kandal - Ponhea Lueu - Preak Pnov (N/A)



Preak Pnov is located in the district of Ponhea Lueu. The population of this commune is approximately 11945 (2004). Groundwater sample collection occurred in January 2007 and consisted of the sampling of 3 tube wells throughout the commune. The attached figure presents the location of Preak Pnov within Kandal as well as groundwater sample locations and exceedances of health-impacting contaminants (when applicable).

Groundwater Quality Rating

An insufficient number of samples were collected in this commune to adequately characterize groundwater conditions. A groundwater quality rating is not presented for this commune.

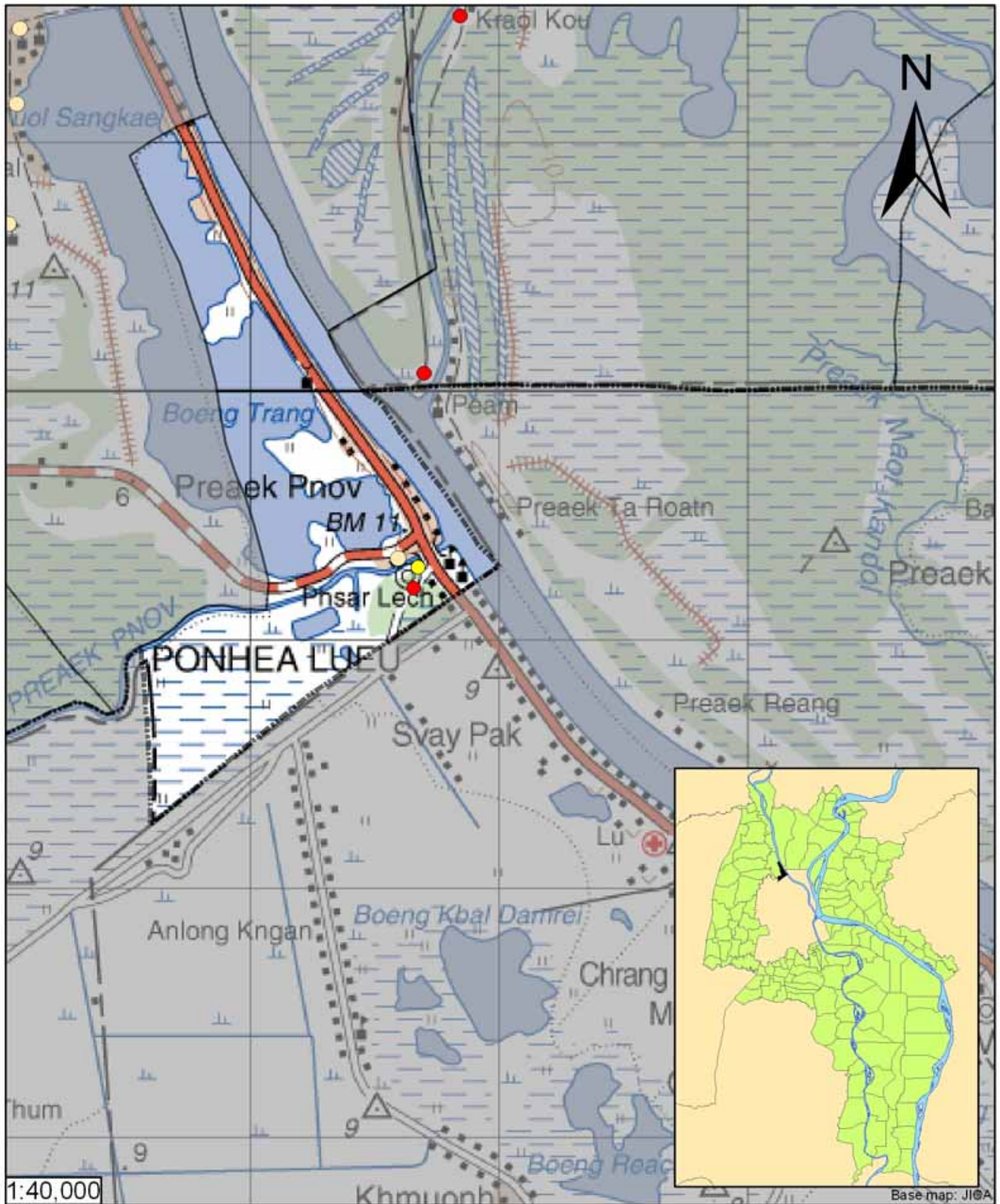
Contaminants of Potential Concern – Health

Arsenic - Elevated concentrations of Arsenic were observed within the commune. 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. 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

Iron - Elevated concentrations of Iron were observed within the commune. At elevated concentrations, Iron causes water to be cloudy and unpleasant to drink. An odor may also be encountered at high concentrations. Iron can also stain laundry, food (can cause discoloration of cooked rice), and leave deposits. Aeration allows oxygen to enter the water and react with Iron to form a compound which is insoluble in water. The newly formed solids will slowly settle to the bottom or can be removed more rapidly by filtration. Performing these procedures may reduce the concentration of Iron in water but follow-up testing is recommended to ensure water quality standards are met.



- Arsenic
- Manganese
- Fluoride
- Nitrate
- No Exceedance
- Provincial Boundary
- Commune Boundary
- 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 Pnov - Ponhea Lueu - Kandal - Cambodia

Resource Development International - Cambodia
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