





## Operation and Maintenance of Drinking **WELLMA** Water Wells to Optimise Performance and Water Quality (WellMa)

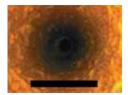
The capacity of drinking water wells, that is the yield for a given drawdown, is often decreasing after a certain time of operation. This effect is called well ageing and is due to different processes related on the one hand to the geology and hydrochemistry at any given well site and on the other hand to the construction and operation features of these wells. The mechanisms and processes are still not fully understood. To avoid impacts on water quantity and quality, wells must be maintained and operation must be adapted to the site and the well conditions.

## Aim of the project

Assessment of room for improvement and optimisation of well design, operation and maintenance to slow down well ageing and ensure water quality

## Work packages

- Diagnosis of well ageing and distinction of the different clogging types
- Optimisation of maintenance planning and maintenance methods
- Prevention or slow-down of well ageing
- Assessment of the impacts of well construction and operation on the water quality



Downhole Camera view into a vertical filter well with reddish brown iron encrustations



Diagnosis campaign at selected wells: Hydrochemical and microbiological analyses

Duration: 11/2007-12/2008 Project volume: 1. phase 521,505 EUR Contact: HELLA WIACEK (CO-ORDINATION) **ELKE WITTSTOCK** Kompetenzzentrum Wasser Berlin gGmbH Berliner Wasserbetriebe hella.wiacek@kompetenz-wasser.de elke.wittstock@bwb.de → www.kompetenz-wasser.de

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