

Example Maintenance Schedule for a Vertical Well

A maintenance strategy needs an inspection schedule that is individually adjusted to the water well:

Inspection frequency	Inspection targets	Inspection strategy
Weekly	Pumped volume and pump operating hours	Calculation of hourly and daily pumping rates Comparison to water rights Even distribution of pumping in well Gallery
	Water levels in well and observation well (in gravel pack) after at least 2 h of pumping	Calculation of entrance resistance (after DVGW W 117)
Semiannually	Water sample analysis	Comparison to previous analyses
Annually	Well test	Comparison to well test performed immediately after construction
	Suspended sand content	Comparison to previous data
	Pumped volume and operating hours of pump	Calculation of pumping rates Comparison to water rights
	Evaluation of energy consumption	Comparison to data from previous years
	Camera inspection	Video / DVD
	Maintenance of equipment	Status and function control (including documentation)
Every 2-3 years	Well rehabilitation (if necessary)	Comparison of well yield before and after rehabilitation
Every 3-5 years	Borehole geophysical investigation of annular seal and casing connections	Check for tightness of annular seal and casing connections

(Houben & Treskatis 2003)