

# AQA Recommendations

	Measure	Aim / Benefit	Minimum Frequency	Quality aim <sup>3</sup>
Laboratory Analysis	Multiple determination	Outlier recognition, increased precision	1x per month <sup>1</sup> per operator and matrix	Difference ≤10%
	Standard measurement	Verification of work method, internal system monitoring	With each 10 <sup>th</sup> sample; at least 1x per month <sup>1</sup> per operator	Maintenance of confidence interval
	Plausibility check	Prevention of matrix-related false readings	If implausible results are obtained or matrix changes occur, or at least 1x per quarter <sup>1</sup>	Difference ≤20%
	Proficiency tests / comparative measurements with operational methods	External system check	1-2x per year per operator	Difference ≤20%
	Parallel measurement with reference method	Verification of the operational method	1x per year per cuvette test	Difference ≤20%
	Pipette	Verification of correct volume	2x per year	Difference ≤1%
	pH meter	Verification of correct function	1x per month	Difference ≤0.2 pH
	Thermostat	Verification of the correct temperature	1x per year	Difference ≤3 °C
	Photometer	Verification of correct function <sup>2</sup>	1x per year	In accordance with manufacturer's specifications
Process	Standard measurement	Internal system monitoring	1x per month	Maintenance of confidence interval
	Plausibility checks	Prevention of matrix-related false readings	If implausible results are obtained or matrix changes occur	Difference ≤20%
	Comparative measurements with laboratory	Verification of correct function	1x per week	Difference ≤20%

<sup>1</sup> Also for important studies (e. g. comparison with official monitoring methods)  
<sup>2</sup> E. g. per test filter set or during instrument maintenance  
<sup>3</sup> It might be worthwhile to define the permissible difference in mg/L rather than as a percentage, e. g. for readings in the very low concentration range.

