



## Test Reports

The below extracts are taken from the full report 'Report on the treatment efficiency test according to EN 12566-3 of the small wastewater treatment plant'. WPL is now WCS Environmental Engineering.

### HiPAF

Test report of the small wastewater plant WPL HiPAF by WPL Limited / May 2011

#### 5.2 Evaluation of the test sequences

The EN 12566 Part 3 requires the evaluation of the nominal loading sequences, i.e. 20 samples taken in the sequences 1, 3, 5, 7 and 9.

Means, minima and maxima as well as the standard deviations are shown hereunder in Table 9 and Table 10.

Table 9: Treatment efficiencies under nominal loading conditions (100 %)

Efficiency [%]	Mean*	Minimum	Maximum	Standard deviation
COD	95.1	90.1	98.5	1.8
BOD <sub>5</sub>	97.8	95.8	99.1	0.9
N <sub>tot</sub>	65.2	22.4	81.6	12.7
NH <sub>4</sub> -N	75.3	20.9	98.7	23.5
P <sub>tot</sub>	46.9	30.6	60.2	8.8
SS	97.4	92.9	99.8	1.7

Table 10: Treated effluents characteristics under nominal loading conditions (100 %)

Effluent	Mean	Minimum	Maximum	Standard deviation
COD [mg/l]	41	15	63	13.5
BOD <sub>5</sub> [mg/l]	8	4	15	3.3
N <sub>tot</sub> [mg/l]	20.3	10.4	35.6	6.6
NH <sub>4</sub> -N [mg/l]	8.8	0.4	30.2	8.5
NO <sub>3</sub> -N [mg/l]	9.2	1.0	16.7	4.7
N <sub>inorg</sub> [mg/l]	18.2	9.5	31.5	5.8
P <sub>tot</sub> [mg/l]	4.6	2.4	6.6	1.0
SS [mg/l]	13	1	30	8.7
Settleable solids [ml/l]	1.0	< 0.1	7.0	1.7

\* Efficiency ratio for the treatment efficiency declaration according to EN 12566-3 chapter 6.3