Applied Microbiology and Biotechnology

Benzene degradation in a denitrifying biofilm reactor: activity and microbial community composition

Marcelle J. van der Waals^{#1,2}, Siavash Atashgahi², Ulisses Nunes da Rocha³, Bas M. van der Zaan¹, Hauke Smidt² and Jan Gerritse¹

Corresponding author

Phone +31 646914584, Fax +31 88 3357856, E-mail: Marcelle.vanderwaals@deltares.nl

¹ Deltares, Subsurface and Groundwater Systems, Princetonlaan 6, 3584 CB Utrecht, the Netherlands

² Wageningen University & Research, Laboratory of Microbiology, Stippeneng 4, 6708 WE Wageningen, the Netherlands

³ VU University of Amsterdam, Department of Molecular Cell Physiology, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands

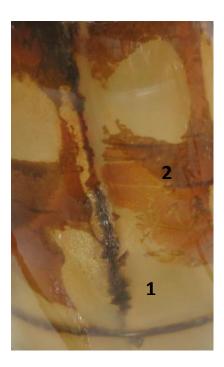


Figure S1 White (1) and brown (2) biofilm attached at the glass wall and metal surfaces in the continuous culture

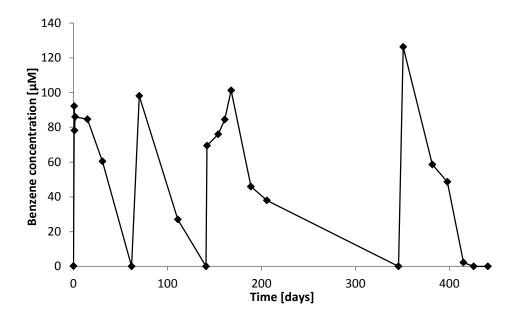


Figure S2 Time course analysis of benzene concentration in the microcosm with transferred liquid from the continuous culture supplied with 100 μ M benzene and 3.6 mM nitrate. After each benzene depletion, benzene was replenished

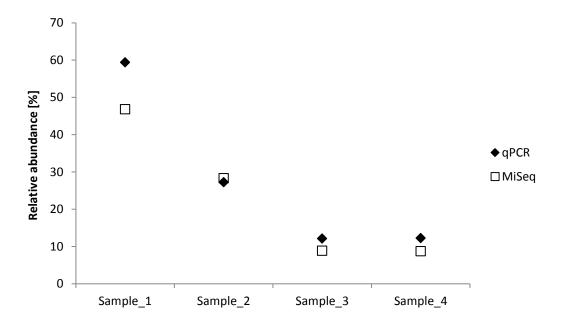


Figure S3 Relative abundance of *Peptococcaceae* versus total bacterial 16S rRNA gene copies in the different samples, calculated using qPCR (closed diamonds) and MiSeq (open squares)