

Supporting Information:

A Steady-State Biofilm Model for Simultaneous Reduction of Nitrate and Perchlorate --

Part 2: Parameter Optimization and Results and Discussion

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This three-page supporting information contains one figure and one table.

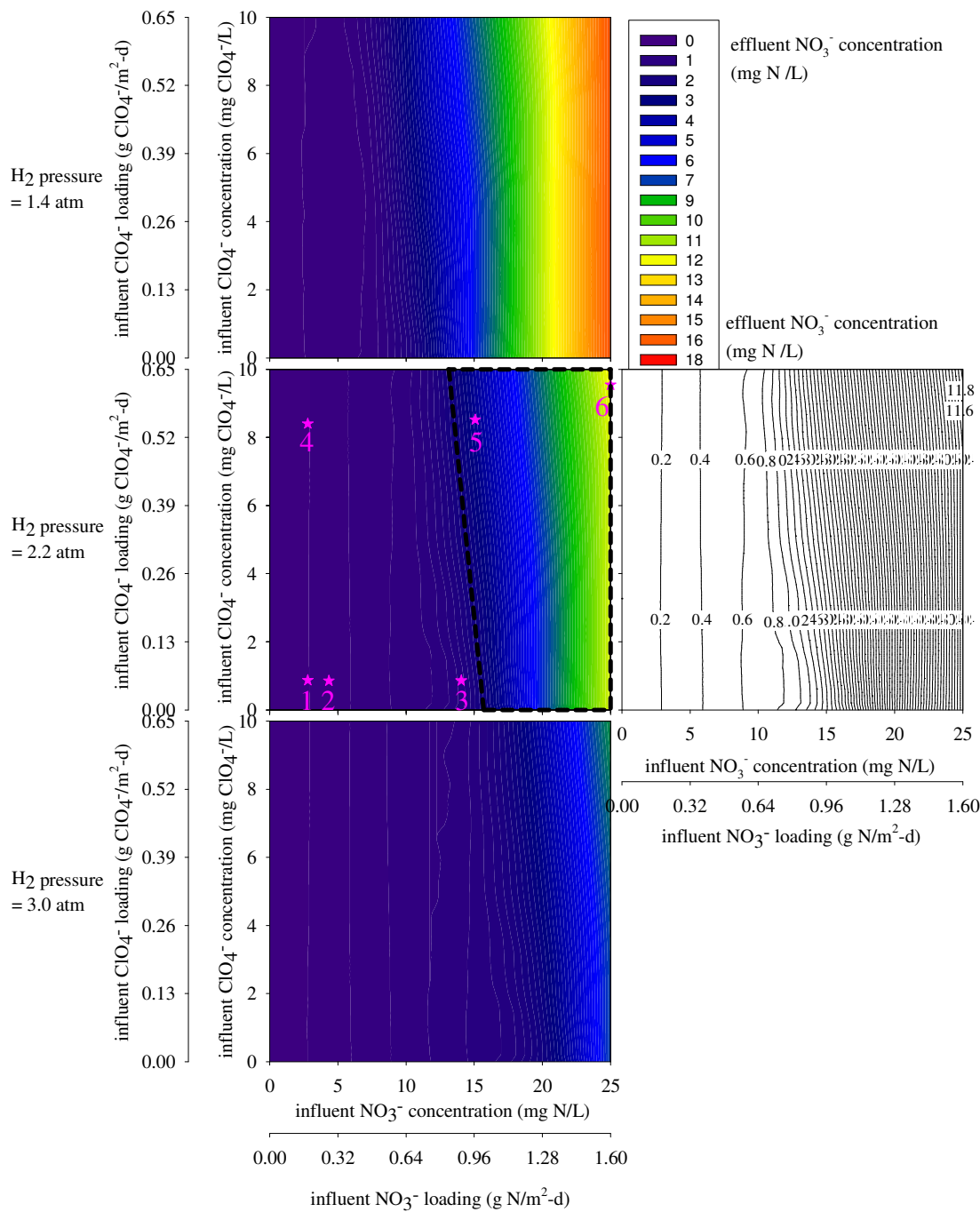


Figure S1 Effluent nitrate concentration contours at different H_2 pressures and nitrate and perchlorate loadings. Top: H_2 pressure @ 1.4 atm; Middle left: H_2 pressure @ 2.2 atm; Middle right: H_2 pressure @ 2.2 atm, with contours labeled; Bottom: H_2 pressure @ 3.0 atm. Stars with numbers identify the locations of the six steady states in the bench-scale tests. The dashed line surrounds the area representing H_2 -limitation at 2.2 atm.

Table S1 Comparison of Biofilm Thicknesses from the Experiments and Model

Steady State	Experiment		Model (μm)
	Range (μm)	Median (μm)	
1	10 - 18	14	23
2	15 - 28	22	30
3	30 - 55	43	58
4	13 - 40	27	33
5	38 - 47	43	56
6	28 - 52	40	57