

Table 14. Laboratory incubation denitrification rates for the experiment of May 5, 2009

[NEC, Northeast Creek watershed; BHM, Bass Harbor Marsh watershed; GW#, measurement site; NO₃, nitrate;

mM, millimolar; nmoles, nanomoles; hr, hour; T₀, date and time chamber sealed and initial gas sampling; g, gram; fr wt, fresh weight;

T₁, T₂, T₃, T₄ subsequent gas sampling times; C₂H₂, acetylene; N₂O, nitrous oxide]

Location	Fr Wt (g)	5-May					Treatment	Number of replicate measurements	N ₂ O Production rate			
		T ₀	T ₁	T ₂	T ₃	T ₄			T ₀ to T ₁	T ₁ to T ₂	T ₂ to T ₃	T ₃ to T ₄
									nmoles/g oven dry soil/hr	nmoles/g oven dry soil/hr	nmoles/g oven dry soil/hr	nmoles/g oven dry soil/hr
BHM GW1	19.8	12:18	13:19	14:18	15:19	16:23	50 mM NO ₃ + C ₂ H ₂	3	-0.205	1.51	2.08	2.15
BHM GW1	18.7	12:19	13:21	14:19	15:22	16:25	50 mM NO ₃	3	-0.272	0.315	0.976	1.82
NEC GW1	19.8	12:21	13:24	14:21	15:23	16:26	50 mM NO ₃ + C ₂ H ₂	3	0.436	2.02	4.78	3.71
NEC GW1	20.0	12:22	13:26	14:22	15:24	16:27	50 mM NO ₃	3	-0.258	1.95	4.74	6.05
BHM GW1	19.81	12:24	13:28	14:23	15:26	16:29	+ C ₂ H ₂	1	-1.09	1.33	1.59	0.745
BHM GW1	19.66	12:25	13:28	14:23	15:26	16:30	Ambient	1	-0.528	0.761	0.314	0.222
NEC GW1	19.55	12:26	13:29	14:23	15:27	16:30	+ C ₂ H ₂	1	0.302	2.38	2.81	0.976
NEC GW2	19.88	12:26	13:29	14:24	15:28	16:30	Ambient	1	0.521	1.25	-0.718	0.186