

Table 22. Laboratory incubation denitrification rates for the experiment of June 2, 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;

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

Location	Fresh weight (g)	T ₀	T ₁	T ₂	Treatment	Number of replicate measurements	N ₂ O Production rate
							T ₁ to T ₂
							nmoles/g oven dry soil/hr
NEC GW3	20	10:45	13:16	15:30	+ C ₂ H ₂	1	0.604
NEC GW3	20.21	10:47	13:18	15:32	Ambient	1	0.109
NEC GW3	20.15	10:48	13:19	15:32	75 mM NO ₃ + C ₂ H ₂	2	27.9
NEC GW3	20.29	10:49	13:20	15:33	75 mM NO ₃	1	24.5
NEC GW3	20.7	10:49	13:21	15:33	75 mM NO ₃ + Glucose	1	43.5
BHM GW1	20.61	10:53	13:23	15:37	+ C ₂ H ₂	1	-1.43
BHM GW1	20.13	10:55	13:25	15:39	Ambient	1	-0.041
BHM GW1	20.22	10:55	13:25	15:39	75 mM NO ₃ + C ₂ H ₂	2	14.9
BHM GW1	20.35	10:57	13:27	15:41	75 mM NO ₃	1	12.5
BHM GW1	20.29	10:58	13:28	15:41	75 mM NO ₃ + Glucose	1	13.5