

Table 11. Rate of release of N₂O measurements made in August 2009.

[BHM, Bass Harbor Marsh Watershed; GW#, measurement site; mM, millimolar; Temp., temperature; °C, temperature degrees Celsius; NO₃, nitrate; nmoles, nanomoles; m, meters; hr, hours; sq square; T₀, date and time chamber sealed; T₁, beginning of period of associated flux calculation; T₂ ending of period of flux calculation; N₂O, nitrous oxide]

Location	Sequence No. ¹	Chamber Sealed (T ₀)	Start Time (T ₁)	End Time (T ₂)	Treatment	Number of replicate measurements ²	Soil Temp. (°C)	Net N ₂ O release ³ (nmoles/s q m/hr)
BHM GW1	1	8/25/2009 11:16	8/25/09 15:24	8/25/09 19:30	75 mM glucose	1	19.8	108
BHM GW1	2	8/25/2009 11:16	8/25/09 19:30	8/26/09 9:00	75 mM glucose	1	19.8	-17
BHM GW1	1	8/25/2009 11:16	8/25/09 15:25	8/25/09 19:31	Ambient	2	19.8	28.2
BHM GW1	2	8/25/2009 11:16	8/25/09 19:31	8/26/09 9:01	Ambient	2	19.8	23
BHM GW2	1	8/25/2009 11:14	8/25/09 15:21	8/25/09 19:33	75 mM glucose	1	19.8	1.8
BHM GW2	2	8/25/2009 11:14	8/25/09 19:33	8/26/09 9:13	75 mM glucose	1	19.8	-0.1
BHM GW2	1	8/25/2009 11:13	8/25/09 15:22	8/25/09 19:34	Ambient	2	19.8	-2,600
BHM GW2	2	8/25/2009 11:13	8/25/09 19:34	8/26/09 9:14	Ambient	2	19.8	481
BHM GW3	1	8/25/2009 11:11	8/25/09 15:18	8/25/09 19:36	75 mM glucose	1	19.8	-68
BHM GW3	2	8/25/2009 11:11	8/25/09 19:36	8/26/09 9:25	75 mM glucose	1	19.8	16.9
BHM GW3	1	8/25/2009 11:10	8/25/09 15:19	8/25/09 19:37	Ambient	1	19.8	-72
BHM GW3	2	8/25/2009 11:10	8/25/09 19:37	8/26/09 9:26	Ambient	2	19.8	39.9
BHM GW4	1	8/25/2009 11:08	8/25/09 15:15	8/25/09 19:26	75 mM glucose	1	19.8	-120
BHM GW4	2	8/25/2009 11:08	8/25/09 19:26	8/26/09 9:31	75 mM glucose	1	19.8	39.7
BHM GW4	1	8/25/2009 11:07	8/25/09 15:16	8/25/09 19:27	Ambient	2	19.8	116
BHM GW4	2	8/25/2009 11:07	8/25/09 19:27	8/26/09 9:32	Ambient	2	19.8	-36
BHM GW5	1	8/25/2009 11:05	8/25/09 15:08	8/25/09 19:20	75 mM glucose	1	19.8	111
BHM GW5	2	8/25/2009 11:05	8/25/09 19:20	8/26/09 10:44	75 mM glucose	1	19.8	-25
BHM GW5	1	8/25/2009 11:04	8/25/09 15:09	8/25/09 19:21	Ambient	2	19.8	184
BHM GW5	2	8/25/2009 11:04	8/25/09 19:21	8/26/09 10:45	Ambient	2	19.8	-110
BHM GW6	1	8/25/2009 11:02	8/25/09 15:03	8/25/09 19:17	75 mM glucose	1	19.8	-150
BHM GW6	2	8/25/2009 11:02	8/25/09 19:17	8/26/09 10:25	75 mM glucose	1	19.8	-31
BHM GW6	1	8/25/2009 11:01	8/25/09 15:04	8/25/09 19:18	Ambient	2	19.8	49.8
BHM GW6	2	8/25/2009 11:01	8/25/09 19:18	8/26/09 10:26	Ambient	2	19.8	-51

BHM GW5	1	8/26/2009 11:15	8/26/09 15:55	8/26/09 18:55	75 mM glucose	1	19.2	829
BHM GW5	2	8/26/2009 11:15	8/26/09 18:55	8/27/09 7:00	75 mM glucose	1	19.2	131
BHM GW5	1	8/26/2009 11:15	8/26/09 15:56	8/26/09 18:56	Ambient	2	19.2	100
BHM GW5	2	8/26/2009 11:15	8/26/09 18:56	8/27/09 7:01	Ambient	2	19.2	1,290
BHM GW5	1	8/26/2009 11:25	8/26/09 15:58	8/26/09 18:58	25 mM NO ₃ + glucose	1	19.2	466,000
BHM GW5	2	8/26/2009 11:25	8/26/09 18:58	8/27/09 7:03	25 mM NO ₃ + glucose	1	19.2	326,000
BHM GW5	1	8/26/2009 11:25	8/26/09 15:59	8/26/09 18:59	25 mM NO ₃	2	19.2	26,200
BHM GW5	2	8/26/2009 11:25	8/26/09 18:59	8/27/09 7:04	25 mM NO ₃	2	19.2	52,300
BHM GW5	1	8/26/2009 11:35	8/26/09 16:01	8/26/09 19:01	5 mM NO ₃ + glucose	1	19.2	41,000
BHM GW5	2	8/26/2009 11:35	8/26/09 19:01	8/27/09 7:06	5 mM NO ₃ + glucose	1	19.2	31,800
BHM GW5	1	8/26/2009 11:35	8/26/09 16:02	8/26/09 19:02	5 mM NO ₃	2	19.2	61,800
BHM GW5	2	8/26/2009 11:35	8/26/09 19:02	8/27/09 7:07	5 mM NO ₃	2	19.2	34,500
BHM GW5	1	8/26/2009 11:45	8/26/09 16:04	8/26/09 19:04	50 mM NO ₃ + glucose	1	19.2	210,000
BHM GW5	2	8/26/2009 11:45	8/26/09 19:04	8/27/09 7:09	50 mM NO ₃ + glucose	1	19.2	275,000
BHM GW5	1	8/26/2009 11:45	8/26/09 16:05	8/26/09 19:05	50 mM NO ₃	2	19.2	127,000
BHM GW5	2	8/26/2009 11:45	8/26/09 19:05	8/27/09 7:10	50 mM NO ₃	2	19.2	132,000
BHM GW5	1	8/26/2009 11:55	8/26/09 16:07	8/26/09 19:07	100 mM NO ₃ + glucose	1	19.2	42,100
BHM GW5	2	8/26/2009 11:55	8/26/09 19:07	8/27/09 7:12	100 mM NO ₃ + glucose	1	19.2	47,000
BHM GW5	1	8/26/2009 11:55	8/26/09 16:08	8/26/09 19:08	100 mM NO ₃	2	19.2	119,000
BHM GW5	2	8/26/2009 11:55	8/26/09 19:08	8/27/09 7:13	100 mM NO ₃	2	19.2	66,100
BHM GW5	1	8/26/2009 12:05	8/26/09 16:10	8/26/09 19:10	200 mM NO ₃ + glucose	1	19.2	25,400
BHM GW5	2	8/26/2009 12:05	8/26/09 19:10	8/27/09 7:15	200 mM NO ₃ + glucose	1	19.2	24,400
BHM GW5	1	8/26/2009 12:05	8/26/09 16:11	8/26/09 19:11	200 mM NO ₃	2	19.2	118,000
BHM GW5	2	8/26/2009 12:05	8/26/09 19:11	8/27/09 7:16	200 mM NO ₃	2	19.2	139,000

¹Sequence numbers refer to the chronologically ordered N₂O release rate measurements at a given site for the same treatment following sealing of the chamber.

²Replicate measurements refers to the number of individual chambers receiving the same treatment. Values shown are for the average of measurements receiving the same treatment.

³ A negative number indicates a decrease in N₂O in the headspace during the measurements interval suggesting N₂O was consumed.