

*Supporting Information Summary*

# Fine-Scale Assessment of Greenhouse Gases Fluxes from a Boreal Peatland Pond

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**Table S1.** Hydrochemical parameter data in the water column in pelagic zone of the pond.

Sampling Date	Pelagic Zone								CH <sub>4</sub> concentration (μM)	CO <sub>2</sub> concentration (μM)	N <sub>2</sub> O concentration (μM)
	Water temperature (°C)	DO (mg l <sup>-1</sup> )	DOC (mg l <sup>-1</sup> )	TN (mg l <sup>-1</sup> )	TP (mg l <sup>-1</sup> )	EC (ms cm <sup>-1</sup> )	pH				
Jun 12th, 2021	10.75	8.31	29.91	3.07	0.133	0.056	6.81	0.089	222.041	0.028	
Jun 20th, 2021	19.81	5.42	33.48	3.00	0.036	0.069	7.16	0.098	136.784	0.015	
Jun 28th, 2021	19.73	6.09	30.13	2.78	0.090	0.070	7.09	0.090	112.763	0.009	
Jul 06th, 2021	24.95	5.89	47.69	2.42	0.113	0.108	7.00	0.045	158.808	0.009	
Jul 14th, 2021	14.60	7.42	47.95	2.38	0.079	0.104	7.33	0.050	255.755	0.011	
Jul 22th, 2021	16.88	6.00	48.75	3.60	0.091	0.095	6.74	0.342	240.531	0.012	
Jul 30th, 2021	17.20	3.77	32.01	3.07	0.018	0.094	6.63	0.170	198.643	0.008	
Aug 06th, 2021	17.41	5.77	33.42	1.76	0.047	0.107	7.03	0.088	326.153	0.011	
Aug 15th, 2021	16.7	4.93	43.05	1.16	0.032	0.133	7.10	0.191	393.814	0.012	
Aug 22th, 2021	10.95	6.77	45.24	1.15	0.044	0.108	7.03	0.135	260.861	0.008	
Aug 29th, 2021	13.09	4.52	61.86	1.52	0.056	0.110	7.14	0.074	242.162	0.016	
Sep 05th, 2021	7.14	7.01	37.33	2.69	0.016	0.054	7.44	0.625	236.609	0.014	
Sep 12th, 2021	7.90	7.05	41.82	1.43	0.018	0.092	6.27	0.052	187.017	0.012	
Sep 19th, 2021	11.65	7.06	37.46	1.15	0.013	0.101	6.78	0.491	210.607	0.017	
Sep 26th, 2021	4.28	10.01	28.10	1.67	0.020	0.087	6.03	1.322	116.209	0.011	
<b>Mean</b>	<b>14.20</b>	<b>6.40</b>	<b>39.88</b>	<b>2.19</b>	<b>0.054</b>	<b>0.093</b>	<b>6.90</b>	<b>0.257</b>	<b>219.917</b>	<b>0.013</b>	

Note: Values are mean values, n=3.