Table S1. Sampling sites for *Fragilaria* and *Ulnaria* strains, isolated from Lake Baikal with associated physical and chemical characteristics

Name of strains	Sampling date	Geographical origin	Latitude Longitude	T °C	Si mg/L	PO_4^{3-} mg/L	TP mg/L	NO_2^- mg/L	NO_3^- mg/L	NH_4^+ mg/L	TOC mgC/L	DO* mg/L
BZ1 BZ3 BZ7 BZ40 BZ264 BZ251	08.09.17	Lake Baikal, Bargusinsky Bay	53°27′24.5″ 108°44′38″									
MM113 MM117	13.03.18	Lake Baikal, Cape Khoboy	53°24′46.6″ 107°47′28.9″	1.8	0.61	0.019	11	0.000	0.47	0.003	1.7	
MM121	13.03.18	Lake Baikal, Cape Zunduk	53°21′45.6″ 107°24′58.0″	1.8	0.63	0.017	12	0.000	0.44	0.003	1.7	
MM98 MM99 MM144 MM239 MM240 MM242 MM243 MM244 MM245 MM246	14.03.18	Lake Baikal, Strait Olkhon Gate	53°01′03.4″ 106°55′47.0″	1.5	0.48	0.017	11	0.001	0.39	0.005	2.8	
ACH108 ACH111 ACH112 ACH274	15.03.18	Lake Baikal, Academician Ridge	53°55′69.2″ 107°99′24.9″	1.2	0.63	0.017	13	0.000	0.45	0.002	1.6	
MM101 MM102 MM103 MM106	16.03.18	Lake Baikal, Kurkut Bay	53°02′,08.2″ 106°51′00.8″	1.5	0.52	0,006	10	0.003	0.18	0.007	2.5	
L148 L149 L150	29.03.18	Lake Baikal, Listvennichneyi Bay	51°51′82.4″ 104°50′60.8″	1.0	0.50	0,023	11	0.001	0.57	0.008	1.6	
BK145 BK146 BK489 BK495 BK497	10.04.18	Lake Baikal, near the settlement of Bolshie Koty	51°53′49.0″ 105°05′21″	1.2	0.53	0.020		0.000	0.35	0.04	1.5	
3B355 3B357	03.06.18	Lake Baikal, 3 km from Baikalskoe	55°20′96.6″ 109°14′63″	2.5	0.65	0,012	0.011	0.000	0.28	0.002	5.6	12.06
CHZ442	23.09.18	Lake Baikal, Chivyrkuisky Bay	53°12′56.4″ 109°06′38″		0.43	0,005	0.013	0.002	0.04	0.007	3.8	10.34
L252	02.06.10	Lake Baikal, Listvennichneyi Bay	51°51′82.4″ 104°50′60.8″									