

**Table S1. Physico-chemical analysis of Pangong sediment sample.**

S.No.	Parameters	Pangong sediment	Unit
1	Conductivity of sediment <sup>a</sup>	1.565	mmho/cm
2	Total organic carbon (TOC) <sup>θ</sup>	0.122	%
3	Total kjeldahl nitrogen (TKN) <sup>*</sup>	0.46	mg/kg
4	Total Dissolved Solids (TDS) <sup>ψ</sup>	5450	mg/kg
5	Phosphorus <sup>ψ</sup>	11	mg/kg
6	Sulphate <sup>ψ</sup>	BDL	mg/kg
7	Ammonical nitrogen <sup>ψ</sup>	34	mg/kg
8	Nitrate nitrogen <sup>ψ</sup>	5	mg/kg
9	Nitrite (as NO <sub>2</sub> ) <sup>ψ</sup>	0.20	mg/kg
10	Calcium (as Ca) <sup>ω</sup>	3889	mg/kg
11	Magnesium (as Mg) <sup>ω</sup>	1287	mg/kg
12	Zn (as Zn) <sup>ω</sup>	28.47	mg/kg
13	Manganese (as Mn) <sup>ω</sup>	548.37	mg/kg
14	Iron (as Fe) <sup>ω</sup>	1.47	%
15	Boron (as B) <sup>ω</sup>	71.90	mg/kg
16	Copper (as Cu) <sup>ω</sup>	46.66	mg/kg
17	Cobalt ( as Cd) <sup>ω</sup>	9.5	mg/kg
18	Molybdenum (as Mo) <sup>ω</sup>	0.56	mg/kg
19	Cadmium (Cd) <sup>ω</sup>	0.12	mg/kg
20	Chromium (Cr) <sup>ω</sup>	17.28	mg/kg
21	Aluminium (as Al) <sup>ω</sup>	0.58	%
22	Barium <sup>ω</sup>	47.14	mg/kg
23	Nickel (as Ni) <sup>ω</sup>	12.98	mg/kg
24	Lead (as Pb) <sup>ω</sup>	5.84	mg/kg
25	Mercury (as Hg) <sup>ω</sup>	BDL	mg/kg
26	Arsenic (As) <sup>ω</sup>	15.09	mg/kg
27	Chloride (as Cl) <sup>ψ</sup>	520	mg/kg
28	Salinity <sup>a</sup>	0.74	ppt
29	Lithium <sup>ω</sup>	14.70	mg/kg
30	Vanadium <sup>ω</sup>	28.80	mg/kg
31	Selenium (as Se) <sup>ω</sup>	0.24	mg/kg
32	Silicon (Si) <sup>ω</sup>	400	mg/kg

<sup>a</sup>APHA2510 B, <sup>θ</sup> IS 2720, <sup>\*</sup> AOAC 955.04, <sup>ψ</sup> Baruah & Barthakur, 1998, <sup>ω</sup> AOAC 990.08.