



Peculiarities of Late Proterozoic of fossilized organogenic constructions in the South-Western Pribaikalie (Southern Siberia)

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The fossilized organic constructions are presented in Goloustenskaya and Uluntuiskaya suites of the Baikal series of Late Proterozoic in the south-western part of Pribaikalie. The Uluntuiskaya suite is subdivided into three packets. The lower packet consists of the sandstones quartz, less often of gravelitics and dolomite, limestone, the middle packet is formed by shale with argillites layers, and the upper packet is represented by dolomite with limestone layers. The fossilized organic constructions can be found out in the lower and in the upper packets. In the lower packet they form small bioherms and biostroms, combined by columnar stromatolites of Conophyton, Baicalia, Compactocollenia groups and microfitolites of Osagia, Vesicularites and Glebosites groups. In the upper packet of Uluntuiskaya suite they form combinations of linear, large bodies which after detailed biostratigraphic researches were named as Kadilninsco-Goloustincs, Kurtunics and Sarminics fossilized organic constructions with stromatolites and microfitolites. These organic constructions are determinated as ancient reefs of Late Precambrian time of Pribaikalie. The length of the Kurtunskaya construction is more than 60 km. The Sarminskaya construction stretches for about 45 km and the Kadilninsco-Goloustinskaya extends for more than 30 km. All of them have been investigated along of series of geological sections. As reefbuilders were columnar stromatolites and microfitolites. Among the forms capable to develop into reefs are allocated frame-buildings and cementers. The frame-buildings of the Kadilninsco-Goloustincs reef are represented by columnar stromatolites of Anabaria, Baicalia, Masloviella, Katavia, Minjaria, Conophyton, Platella groups and laminae stromatolites of the Stratella group. The cementers haven't been participated in build-

ing of the skeleton of the fossilized organic constructions, but they play an essential role in accumulation of reef bodies. They are demonstrated by *Osagia*, *Vesicularites*, *Vesicularia*, *Nubecularites*, *Conferta* groups of microfossils. The localization of reefs in the Pribaikalie precratonic foredeep has been predetermined by simultaneously developed tectonic uplift and depression. The paleogeographic conditions of organic constructions growth are determined by existing of a warm shallow basin, with the insignificant quantity of terrigenous material accumulation and fundamental accumulation of biogenic sediments. Stromatolites constructions contributed to paleorelief formation at the bottom of the basin. The organic constructions of Baikal series in the south-western part of Pribaikalie are referred to the first Late Proterozoic (Riphean, Vendian) planetary stage of the fossilized reef formation.