

New Data on the Organic Reef Buildups of the Upper Jurassic Deposits Within South-East Caucasus

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Paleontological aspects of Upper Jurassic Reef Massive of South-East Caucasus were studied by famous Azerbaijani Paleontologist R.G.Babayev. However these organic buildups by the Sedimentology position have not been covered in details in the Geological Literature.

Author under the guidance of prof. Ch.M.Khalifazade is conducted the field research on distribution of Upper Jurassic Organic Buildups for determining Morphology, Size and Sedimentology Structure and took samples for Complex Laboratory Research.

At the same time we used and generalized the results of Seismic exploration, conducted by "Caspian Geophysics on the Northern part of South Caspian Trough", in order to inspect the existence of Organic Reef Buildups in Upper Jurassic deposits under Neogene-Quarternian Sediments.

Upper Jurassic Reef Formation in South-East Caucasus is widely spread, in two Facies-Structures zone – Shahdag-Sudur and Sokhub-Beshbarmak.

Bioherms and Bioherm Massive in the Shahdag-Sudur zone are Barrier Reefs, in fact they separate Euoparite basin of North Caucasus from Flysch basin of South Slope of Great Caucasus.

Bioherms and Bioherm accumulative Massive of Sohuh-Beshbarmak Zone are from Middle and Upper Oxford Age and toward the East direction they subsided under Anthropogenic Cover in North Absheron Trough. Thickness of Bioherms in this area fluctuates in range 30-70 m and thickness of Bioherm massive reaches to 200-300m.

Oxfordian Bioherms consists of fossils-skleroactinia (Coral). Reef consist of following living organisms; Mollusks, Echinodormats, Brachiopads, Lime Algal and Foranimifers.

Reef Massive has complicated Structure. In the vertical section of Reef Massive begining from Skleroactinia bedding in the forms of Lens, it alternates into organic fragmental oolite and hemogenic Limestones. At Chiragkala we found Marl-Silt layer as well as Reef Limestones, which consist of Calcite and sometimes Dolomite in its Mineralogical Structure. Dolomites has spotted character and originated from the diagenetic and Catagenetic stages of Reef Limestones.

Chemical analysis of pure white organic Limestones shows that content of MgO in this research is 5-8%, high content of MgO, and results X-Ray diffraction analysis indicated that Reef Limestones is 10% presented by Magnesium-Calcite.

Therefore We assumed, that dolomite in Upper Jurassic Bioherms and Bioherm Massives was originated only in the Stages of i Diagenesis and Catagenesis.

Key words: *Reef, Sedimentology, Caucasus, Bioherm, Limestone, Dolomite*