САВЕЛЬЕВА и др.

LIMESTONES FROM THE VAKHIL RISE (EASTERN KAMCHATKA): LITHOLOGICAL AND GEOCHEMICAL DESCRIPTION

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The authors studied siliceous limestones from the Vetlovsky complex of the Vakhil rise (Eastern Kamchatka). The paper provides their lithological and geochemical characteristic. The new limestones were compared with the previously studied limestones from the Albian-Cenomanian Smagin association of the Kamchatsky Mys peninsula, as well as with Cretaceous carbonates from the Pacific underwater rises. Limestones from the Vetlovsky complex deposited in the pelagic environments at low sedimentation rates, and under oxidizing conditions. Terrigenous input in deposits was insignificant. According to the geochemical data, some layers of limestones contain pyroclastics of various composition, which indicate a deposition in the area of island arc volcanism effect. The sedimentation occurred on the oceanic intraplate volcanic rise or on the internal rise of backarc basin. The major part of siliceous-carbonate oozes were forming between depths of 1-1.5km.

Keywords: siliceous limestones, pelagic sedimentation, petrochemical modules, barium, manganese.