

Geochemical Characteristics and Implications for Stratigraphic Correlation of Lenticular Limestone on Maokouan Stage of Permian in Luocheng, Guangxi

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[Abstract] The problems the author have outlined here are largely related to the study of lenticular limestone's geochemical characteristics and forming reason of the limestone and shale who mixs with thin coal seam on Maokouan stage of Permian in Luocheng, Guangxi. According to the ground observation, combining with the hand specimen which is appraied by naked eye and polarizing microscope to analyze it's texture and structure, we find it is Devonian system limestone who presents a boudinage cause of deformation. The experiments were carried out to test its major elements、 trace elements and REE by using XRF method、 lithium borate melting and ICP-MS. Lenticular limestone's chief constituents are CaO and SiO₂. The total rare earth element(REE) contents are from 2.81ug/g to 6.977ug/g ,mean value is 5.725 ug/g. The black lenticular limestone and the dolomite which include the lenticular are contemporaneous relationship.

[keywords] lenticular limestone; geochemical characteristics; forming reason,