

Organic Matter in the Upper Silesian (Mississippi Valley-Type) Zn-Pb Deposits, Poland

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Abstract

Organic matter contained in large amounts in the Upper Silesian Zn-Pb ore deposits has been identified as dopplerite-calcium humate. This humic, amorphous substance was precipitated from humic acids by calcium ion loading. The precipitation of dopplerite was contemporaneous with sulfide deposition at the time of initial and mature karst processes. The hydrothermal karst dissolution supplied calcium ions but the source of humic acids is still conjectural. The geochemical data indicate that the most probable source for the organic matter deposited in the Zn-Pb ores are overlying Triassic Keuper shales containing dispersed humic organic substance.