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## Paleozoic Shallow Epeiric Seas of Iraq: Sedimentologic and Basin Evloution Study

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The lithofacies and tectonic evolution of the Paleozoic formations, ranging in age from Ordovician to Permian, are studied in eight boreholes from north to western and southern Iraq, which can be tied to the type sections of the formations in northern Iraq. The studied successions are divided into several cycles. The Ordovician and Silurian cycles are characterized by dominantly clastic deposition, and were deposited in a shallow marine environment The younger Paleozoic cycles are characterized by mixed siliciclastic- carbonate sedimentation and wide geographic distribution that are interpreted to have been deposited in epicontinental or epeiric seas setting in which the sediments were deposited in homoclinic- ramp environment. Epicontinental seas regressed and transgressed over vast areas throughout the Paleozoic, resulting in generally uniform thicknesses and lithotype associations. This paper, therefore, examines the Paleozoic formations in Iraq in terms of its petrography, lithofacies in order to provide more detail on their depositional and basin evolution.