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## **Depositional Setting of the Seafloor and Near-Surface Interval on the Continental Slope Off the Nile Delta, Deepwater Egypt**

Investigation of a large 3D seismic survey (~7000 km<sup>2</sup>) to assess potential drilling hazards provided an opportunity to conduct a regional study of the seafloor and near-surface stratigraphy (upper 500 ms of seismic data) seaward of the Nile Delta in 900 to 2200 m of water depth. Sparse updip well logs and several long piston cores were the only limited data available to calibrate the seismic survey in the southern Northeastern Mediterranean (NEMED) Deepwater Block offshore of Egypt. Analysis of the seafloor morphology revealed two distinct styles. The western two-thirds of the survey is characterized by flat first-order topography that is highly crenulated on a second-order scale of 1 to 10 m. Significant structural relief that exceeds 250 m in a well-developed graben system characterizes the eastern third of the survey. The near-subsurface interval reflects equally diverse stratigraphic patterns. Highly channelized packages dominate one stratigraphic near-surface interval of the western survey. Most channels features are single channel-levee systems, but one prominent channel-belt system exists. Pondered-fan sequences dominate the near-surface eastern survey. These fans occupy minibasins that occur throughout the near-surface section. Review of the deeper subsurface section indicates the thickness of Upper Miocene (Messinian) evaporites correlates well with the map and stratigraphic thickness of deeper in the section appears to be a control of these morphological differences between the western (thinner evaporites) and the eastern (thicker evaporites) survey areas. This observation combined with the improved imaging of depositional features in the near-surface section contributes to a better understanding of framework and prospectivity of the deeper interval.