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## Documentation of Isolated Lenses of High-Velocity, Eocene to Miocene Limestone within Clastic Rocks above and below Allochthonous Salt Bodies, North-Central Gulf of Mexico

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### ABSTRACT

The Cenozoic depositional history of the slope and deepwater Gulf of Mexico (GOM) is dominated by slope and basinal terrigenous, clastic sedimentation with few documented examples of interbedded carbonate lithologies. Two areas in the Walker Ridge and Keathley Canyon areas of the north-central GOM—together covering an area of the GOM about 12,000 km<sup>2</sup>—contain high-velocity anomalies we have correlated to micritic, carbonate lithologies using 42 mud logs from the Bureau of Ocean Energy Management (BOEM). The fast anomalies were seen at three levels: below the Louann Salt, above the Louann Salt, and above the Wilcox Formation of Paleocene age. BOEM mud logs verified that the velocity anomalies correlated with micritic carbonate lithologies present on the logs that have been biostratigraphically dated in well reports as Eocene, Oligocene, and early Miocene. Work is continuing on locating cores to establish better the paleoenvironment and original water depths of these micrite lenses.

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