



**U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region**

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Deepwater Gulf of Mexico OCS Currents

You are advised of the possible existence of significant Gulf of Mexico (GOM) deepwater currents that could affect offshore operations and facility designs. The Minerals Management Service (MMS) has become aware of proprietary, site-specific measurements recorded over a 2-year period in Gulf of Mexico Outer Continental Shelf waters 6,000 feet deep. Those measurements seem to indicate the presence of currents with velocities approaching one knot and which extend from a level 3,000 feet below the water surface down to the seafloor. Early data indicate that these deep currents are not the result of (or induced by) loop current eddies that circulate throughout the GOM.

In response to the initial findings from those proprietary studies and to concerns regarding the potential impact of such currents on OCS operations, MMS is preparing to fund a 1-year current measurement program (with options to extend it to 2 years). Such a field investigation will attempt to replicate the measurements from the proprietary studies. The MMS is also exploring the possibility of second current measurement program in the same water depth at a site several miles to the west of the first site. The MMS hopes such work will be undertaken as part of a joint industry project to confirm the existence (or absence) of the reported currents and provide information regarding changes in current structure and magnitude as these currents move laterally across the Gulf of Mexico in an east-west direction.

Parallel to this research effort, MMS is gathering information about the drilling and production experiences to date in water depths beyond 5,000 feet as a way to determine if there has been any indication of these deep currents affecting activities. Operators planning operations in deepwater areas of the Gulf of Mexico should be prepared to discuss the possible existence of such currents and the impact they may have on planned operations. The MMS is particularly interested about the effect such currents will have on equipment design and installation. Specifically, the effects on both seabed equipment and the production riser are concerns MMS has for deepwater development projects.

—GOMR—MMS—

MMS Internet Homepage: <http://www.gomr.mms.gov>