Technical Announcement



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

Date: May, 2008

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Deepwater Currents in the Eastern Gulf of Mexico Observations at 25.5[•]N and 87[•]W

OCS Study MMS 2008-001

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, *Deepwater Currents in the Eastern Gulf of Mexico: Observations at* 25.5°N and 87°W.

This report present the analysis of current data collected at $87^{\circ}W$, 25.5°N in water depths of ~3,600 m (11,800 ft), within a narrow channel connecting the eastern and central basins of the Gulf of Mexico. The mooring is an entire water-column array over a nearly flat bottom. The data suggest that the Gulf of Mexico can be viewed as a two-layer system with the interface at 700-800 m (2,295-2,623 ft) driven by the Loop Current and coinciding with the sill of the Florida Straits. The lower layer tends to have uniform currents in the vertical and speeds of 10-30 cm/s (0.3-1 ft/s). Short events of near uniform currents from top to bottom were observed and coincided with a Loop Current extended to its maximum northward position shortly before shedding an eddy.

This report is available only in compact disc format from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$15.00, by referencing OCS Study MMS 2008-001. The report may be downloaded from the MMS website through the Environmental Studies <u>Program Information System (ESPIS)</u>. You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

Minerals Management Service Gulf of Mexico OCS Region Public Information Office (MS 5034) 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394 Telephone requests may be placed at (504) 736-2519, 1-800-200-GULF, or FAX: (504) 736-2620 U.S. Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, Virginia 22161 (703) 487-4650 or FAX: (703) 321-8547 Rush Orders: 1-800-336-4700