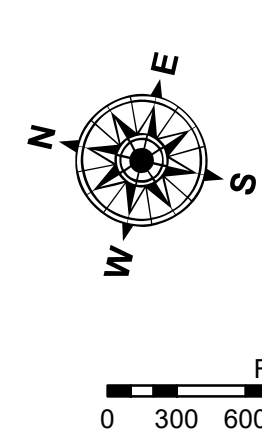


**LEGEND**

--- Federal Navigation Channel	○ Cable Area	■ Shoaling Area	■ 0' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -5' to -9'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	□ -9' and below
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	



LWRP: 13.6  
 Gage Reading: KL:27.1 RR:24.7 USED: 24.9 NAVD  
 Sea Conditions: CALM  
 Vessel Name: M/V OB 189  
 Survey Type: CONDITION  
 Sounding Frequency\*\*\*: HIGH

**NOTES:**  
 Horizontal Coordinate System:  
 North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.  
 Vertical Datum:  
 Soundings are shown in feet and indicate depths below Low Water Reference Plane 2007 (NAVD).  
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.  
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.  
 2015 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.  
 Reference is USACE IENC U35LM236.  
 \*\* Shoalest Sounding per Quarter per Reach.  
 \*\*\* High frequency (200 kHz) survey data represents the first signal return at a sounding location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz) survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer settings.



**DISTRIBUTION LIABILITY:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results of the application of the data for other than its intended purpose.  
 Data Constants: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to eroding banks, shifting sandbars, and other natural processes. The US Army Corps of Engineers accepts no responsibility for changes in the hydrographic conditions when developed after the date of the survey. Product maintainers should not rely solely upon this information for navigation purposes.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Surveyed By: RYLAND/RHODEN	Plotted By: BD
Submitted:	Checked By: AC
Recommended: Chief Survey Section	Approved: Chief Waterways Maintenance Section

**MISSISSIPPI RIVER - SHALLOW DRAFT  
 SMITHLAND - SHEET 1  
 MS\_09\_SM1X\_20211216\_CS  
 16 December 2021**

**Sheet Reference Number  
 9 of 39**

Revision Number:  
 4.2-20200420