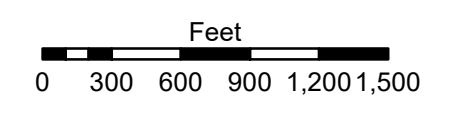
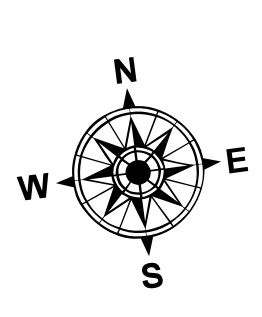


**LEGEND**

--- 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: 12.1  
 Gage Reading: RR:30.1BR:14.0 USED: 28.5 NAVD  
 Sea Conditions: CALM  
 Vessel Name: M/V OB189  
 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.



**DISCLAIMER:**  
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were prepared, or implied concerning the accuracy, completeness, reliability, usability or suitability, for any particular purpose of the recipient. The user is responsible for the results obtained from 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 changing hydrographic conditions when develop after the date of the survey. The user is responsible for the results obtained from the application of the data for other than its intended purpose.  
 The information depicted on this map represents the results of a survey conducted on the date shown. The user is responsible for the results of the survey. The user is responsible for the results of the survey. The user is responsible for the results of the survey.

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

**MISSISSIPPI RIVER - SHALLOW DRAFT  
 SMITHLAND - SHEET 3  
 MS\_11\_SM3X\_20201202\_CS  
 02 December 2020**

**Sheet  
 Reference  
 Number  
 11 of 39**

Revision Number:  
 4.1-2019115