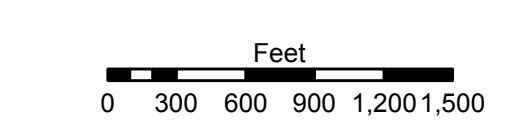
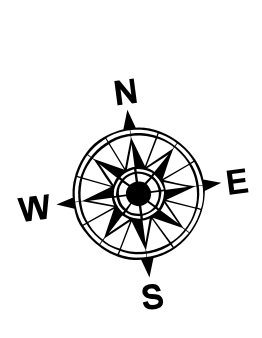


**LEGEND**

--- 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: 12.6  
 Gage Reading: RR:48.7BR:31.9 USED:47.0 NGVD  
 Sea Conditions: CALM  
 Vessel Name: OB-189  
 Survey Type: CONTROL  
 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 (NGVD).  
 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.  
 2010 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.



**ACCESSORIES**  
 Access: Coastlines, 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 provided. The user is responsible for the results of any use of the data for other than its intended purpose.  
 Distribution Liability: The data represents the results of data collection processing for a specific US Army Corps of Engineers project and is only valid for its intended use. Control, time and accuracy specifications. The user is responsible for the results of any use of the data for other than its intended purpose.  
 Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging operations, changes in channel conditions, and changes in the hydrographic conditions when developed after the date of the survey. The user is responsible for the results of any use 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 indicated and is not to be considered to represent the general condition existing at that time.

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

**MISSISSIPPI RIVER - SHALLOW DRAFT  
 SMITHLAND - SHEET 3  
 MS\_11\_SM3\_20160412  
 12 April 2016**

**Sheet Reference Number  
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