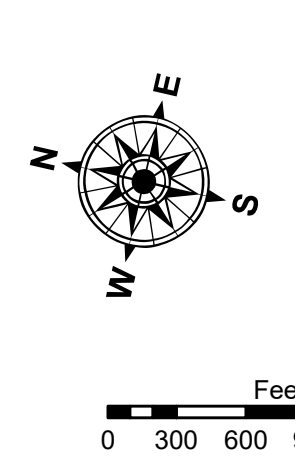


LEGEND

--- 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: 14.2
 Gage Reading: KL:28.6 RR:26.2 BR:12.5 USED:26.5
 Sea Conditions: CALM
 Vessel Name: 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 (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.



DISCLAIMER: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information furnished. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained from the use of this information. The application of the data for other than its intended purpose is at the user's risk.

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: DS/DOR
Recommended: Chief Survey Section	Plotted By: BD
Approved: Chief Waterways Maintenance Section	Checked By: AC

**MISSISSIPPI RIVER - SHALLOW DRAFT
 SMITHLAND - SHEET 1
 MS_09_SM1_20171206_CS
 06 December 2017**

**Sheet Reference Number
 9 of 39**

Revision Number:
 3.13-20160811