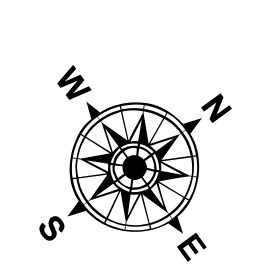
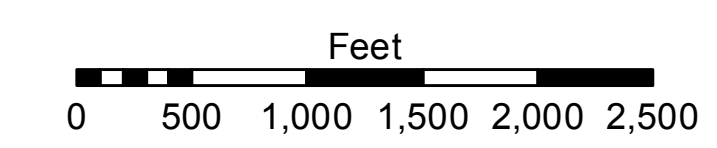


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	✈ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
◆ Green Navigation Buoy	

0' and above
0' to -5'
-5' to -10'
-10' to -20'
-20' to -30'
-30' to -35'
-35' to -40'
-40' to -45'
-45' and below



LWRP: 2.1
 Gage Reading: BR:6.7 D:4.5 USED:5.50 NAVD
 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 (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 N.O.A.A. Navigation Chart No. 11370.

** 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 United States Government makes no warranty, express or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information provided. 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: RYLAND/SIMMONS	Plotted By: BD
Recommended:	Chief, Survey Section	Checked By: AC
Approved:	Chief, Waterways Maintenance Section	

**MISSISSIPPI RIVER - B.R. TO GULF
 BAYOU GOULA CROSSING
 MD_13_GOU_20211012_CS
 12 October 2021**

**Sheet
 Reference
 Number
 13 of 97**