



**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 -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -10' to -20'
— Project Depth Contour	★ Wrecks-Submerged	◆ Green Navigation Buoy	■ -20' to -30'
			■ -30' to -35'
			■ -35' to -40'
			■ -40' to 45'
			■ -45' and below

LWRP: 1.0  
 R:5.8NO:3.2 USED:5.7 NAVD  
 Gage Reading:  
 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.  
 2017 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.  
 Reference is N.O.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.



The data represented on this map was derived from a variety of sources including aerial photography, ground surveys, and other data. The data is not intended to be used for navigation or other purposes. The user is responsible for the accuracy and reliability of the data. The user is also responsible for the accuracy and reliability of the data. The user is also responsible for the accuracy and reliability of the data.

Submitted By: RYLAND HOSCHMANN	Plotted By: AO	Checked By: AC
Recommended By: Chief Survey Section		
Approved By: Chief Waterways Maintenance Section		

**MISSISSIPPI RIVER - B. R. TO GULF  
 RESERVE - SHEET 1  
 MD\_36\_RE1X\_2020\_CS  
 17 November 2020**

**Sheet  
 Reference  
 Number  
 36 of 97**

Revision Number: 4.1-20191105