



**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: 1.4  
 Gage Reading: BR:9.40 D:5.49 USED:5.8 NGVD  
 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 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.



**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. The user is responsible for the results of any application of the data for other than its intended purpose.  
 Data Contaminants: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging operations, channel migration, and other factors. The user is responsible for the results of any 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 indicated. It is not to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any application of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By:
Recommended:	DS/JA
Approved:	Plotted By:
	BD
	Checked By:
	AC

MISSISSIPPI RIVER - B.R. TO GULF  
 81 MILE POINT  
 MD\_21\_81P\_20171020\_CS  
 20 October 2017

Sheet Reference Number  
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