



LEGEND			
--- Federal Navigation Channel	○ Cable Area	□ Borrow 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

**Compass Rose**  
**Scale:** 0 500 1,000 1,500 2,000 2,500 Feet  
**LWRP:** 1.3  
**Gage Reading:** D:17.34 R:12.92 USED:15.30 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 Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of the application of the data for other than its intended purpose.  
 The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The user is responsible for the results of the application of the data for other than its intended purpose. The user is responsible for the results of the application of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: RYLAND/SOUKI	Plotted By: BD
Recommended: Chief Survey Section	Checked By: AC	Approved By: AC

**MISSISSIPPI RIVER - B.R. TO GULF  
 RICH BEND CROSSING  
 MD\_29\_RIB\_20180601\_CS  
 01 June 2018**

**Sheet Reference Number  
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