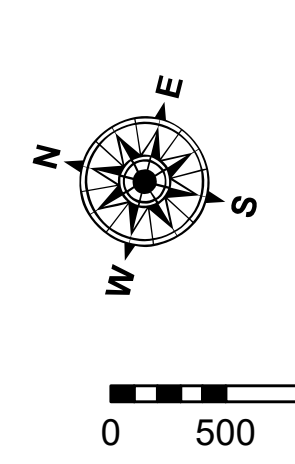
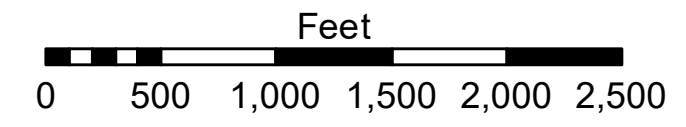


LEGEND		Color Legend	
--- Federal Navigation Channel	○ Cable Area	Green	0' and above
— Federal Navigation Center Line	□ Placement Area	Yellow	0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	Orange	-5' to -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	Light Blue	-10' to -20'
— Project Depth Contour	★ Beacon, General	Blue	-20' to -30'
	◆ Wrecks-Submerged	Dark Blue	-30' to -35'
		Light Purple	-35' to -40'
		Dark Purple	-40' to 45'
		White	-45' and below
	□ Borrow Area		
	● Shoalest Sounding**		



LWRP: 1.2  
 Gage Reading: D:14.2 R:10.2 USED:12.6 NAVD  
 Sea Conditions: CALM  
 Vessel Name: OB-189  
 Survey Type: AD  
 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.  
 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 they are not to be used for any purpose other than that for which they were prepared. The user is responsible for the results of their use. The application of the data for other than its intended purpose is not warranted. Hydrographic survey data is subject to change due to several factors including but not limited to dredging, shoaling, and other changes in the river channel. The user is responsible for the results of their use of these data. The information depicted on this map represents the results of a survey conducted on or about the date indicated. It is not to be used for navigation purposes. The information depicted on this map represents the results of a survey conducted on or about the date indicated. It is not to be used for navigation purposes.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By:	Checked By:
Recommended:	Plotted By:	AC
Approved:	Chief Survey Section	Chief Waterways Maintenance Section

**MISSISSIPPI RIVER - B.R. TO GULF  
 RICH BEND CROSSING  
 MD\_29\_RIB\_20200716\_CS  
 16 July 2020**

**Sheet  
 Reference  
 Number  
 29 of 97**