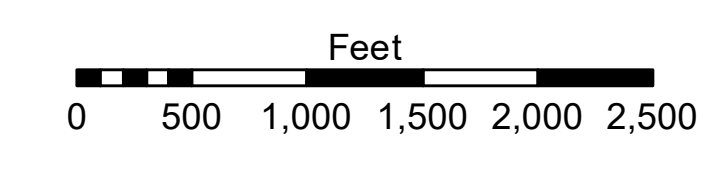
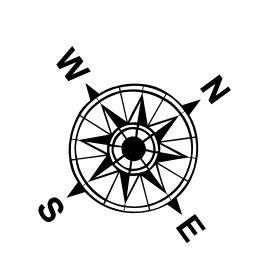


**LEGEND**

--- Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ 0' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -5' to -10'
— As-built Pipeline/Cable	□ Anchorage Area	☆ Beacon, General	■ -10' to -20'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -20' to -30'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	■ -30' to -35'
			■ -35' to -40'
			■ -40' to 45'
			■ -45' and below



LWRP: 1.9  
 Gage Reading: BR:30.7D:21.3 USED:25.3 NGVD  
 Sea Conditions: 1  
 Vessel Name: LAFORUCHE  
 Survey Type: CS  
 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.

2015 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 United States Government makes no warranty, express or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information furnished. 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 shall indemnify and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government as a result of the use of this information for purposes other than those for which it was intended. The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The information is not intended to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: JH/PS
Recommended: Chert, Survey Section	Plotted By: AO
Approved: Chert, Waterways Maintenance Section	Checked By: AO

**MISSISSIPPI RIVER - B.R. TO GULF  
 BAYOU GOULA RECON  
 MR\_13\_GOU\_20181127\_CS  
 27 November 2018**

**Sheet Reference Number  
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