



<b>LEGEND</b>	
— Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	■ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	★ Beacon, General
— Project Depth Contour	⊗ Obstruction Point
	✗ Wrecks-Submerged
	■ Borrow Area
	● Shoalest Sounding**
	◆ Red Navigation Buoy
	◆ Green Navigation Buoy

**NOTES:**

LWRP: 1.9  
Gage Reading: BR:33.0D:22.6 USED:28.3 NAVD  
Sea Conditions: SMOOTH  
Vessel Name: LAFOURCHE  
Survey Type: CS  
Sounding Frequency\*\*\*: HIGH

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.  
2015 Aerial Photography data source: NAIP, USDA-FSA-AFPO Aerial Photography Field Office.  
Reference is N.O.A.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.



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Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging activity, new structures, shoaling, and changes in the hydrographical conditions which occur after the date of publication. This data is intended for use by Army Corps of Engineers personnel and contractors only. The data is not to be distributed outside the Army Corps of Engineers without prior approval.

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

**MISSISSIPPI RIVER - B.R. TO GULF**  
**GRANADA CROSSING**  
**MD\_10\_GRA\_20190807\_CS**  
07 August 2019

Sheet  
Reference  
Number

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