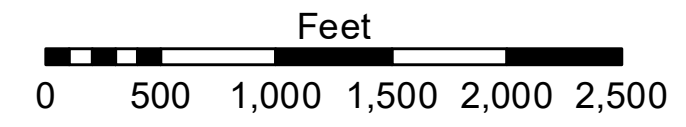
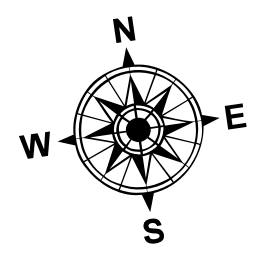


LEGEND			
— Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ 0' and above
— Federal Navigation Center Line	■ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -5' to -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation 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



LWRP: 1.9
 Gage Reading: BR:11.79 DON:6.57 USED:9.4 NGVD
 Sea Conditions: CALM
 Vessel Name: M/V LAFORUCHE
 Survey Type: RECON
 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 based 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.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 bathymeter settings.



DISTRIBUTION LIABILITY: The data represents the results of data collection for a specific US Army Corps of Engineers project and is only valid for its intended use, contract, time and accuracy specifications. The user is responsible for the results. The user's application of the data for other than its intended purpose is at their own risk. Data Collection: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to changing hydrographic conditions which develop after the date of the survey. The US Army Corps of Engineers does not warrant the accuracy of these data to others without transferring the disclaimer. The information depicted on this map represents the results of a survey and is not to be used for navigation purposes. The Corps of Engineers is not responsible for any damage or injury to persons or property resulting from the use of this information. The Corps of Engineers is not responsible for any damage or injury to persons or property resulting from the use of this information. The Corps of Engineers is not responsible for any damage or injury to persons or property resulting from the use of this information.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: DS/PS	Plotted By: MS
Recommended:	Chief, Survey Section	Checked By: MS
Approved:	Chief, Waterways Maintenance Section	

**MISSISSIPPI RIVER - B. R. TO GULF
 GRANADA RECON
 MR_10_GRA_20171129_CS
 29 November 2017**

**Sheet Reference Number
 10 of 97**