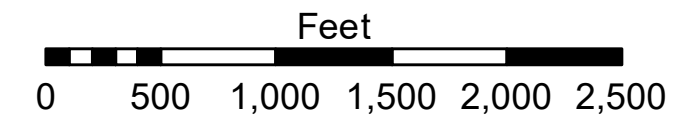
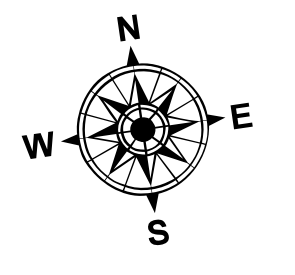


LEGEND		LEGEND		LEGEND	
— Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ 0' and above	☆ Beacon, General	■ 0' to -5'
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -5' to -10'	◆ Red Navigation Buoy	■ -10' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon,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



LWRP: 1.9
 Gage Reading: BR:7.66 D:3.95 USED:6.0 NGVD
 Sea Conditions: CALM
 Vessel Name: M/V LAFORCHE
 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 data. The user is responsible for the results of the application of the data for other than its intended purpose. These data are provided to the recipient under no liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore the Government provides data. The recipient may not transfer these data to others without also transferring this Disclaimer. The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The information is considered to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: SPS:JH	Plotted By: BD
Recommended: Chief, Survey Section	Checked By: MS	Approved By: MS

**MISSISSIPPI RIVER - B.R. TO GULF
 GRANADA CROSSING
 MD_10_GRA_20171220_CS
 20 December 2017**

**Sheet
 Reference
 Number
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