



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:19.0D:11.5 USED:16.7 NGVD
Sea Conditions: CALM
Vessel Name: M/V LAFOURCHE
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 data represents the results of data collection performed for a specific US Army Corps of Engineers project and is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose, the user assumes all responsibility for changes in the data. Hydrographic survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and channel migration. The US Army Corps of Engineers does not assume any liability for changes in the hydrographic conditions when developed after the date of the survey. Product maintainers should not rely solely upon this information.

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

**MISSISSIPPI RIVER - B.R. TO GULF
 GRANADA CROSSING
 MD_10_GRA_20150823
 23 August 2015**

**Sheet Reference Number
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