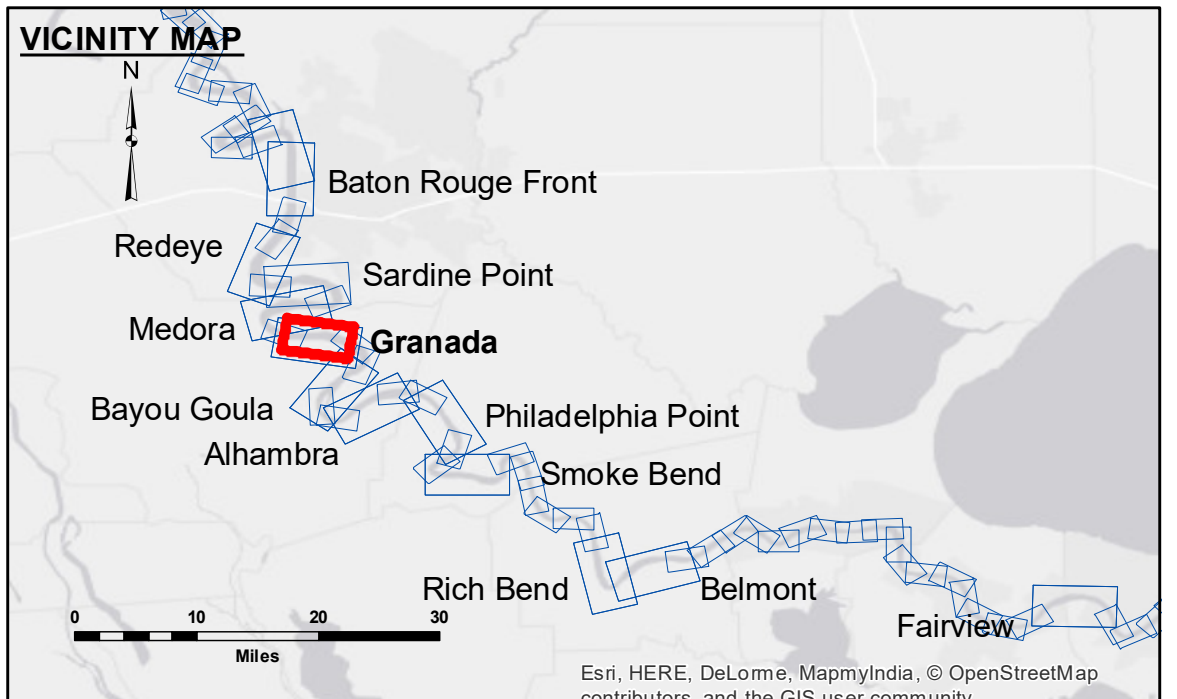


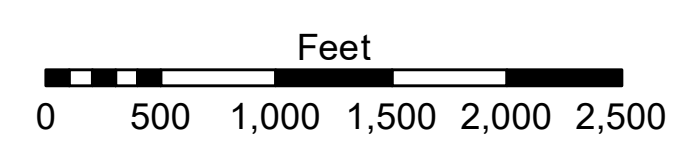
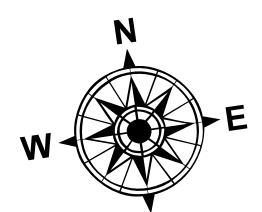
DISCLAIMER: The data represents the results of data collection processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project or application. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is at the user's risk.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: SPS_JH	Plotted By: BD
Recommended: Chief Survey Section	Checked By: AC	Checked By: AC
Approved:	Chief Waterways Maintenance Section	

**MISSISSIPPI RIVER - B.R. TO GULF
GRANADA RECON
MR_10_GRA_20171205_CS
05 December 2017**



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



LWRP: 1.9
Gage Reading: BR:12.63 D:7.29 USED:10.2 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.

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