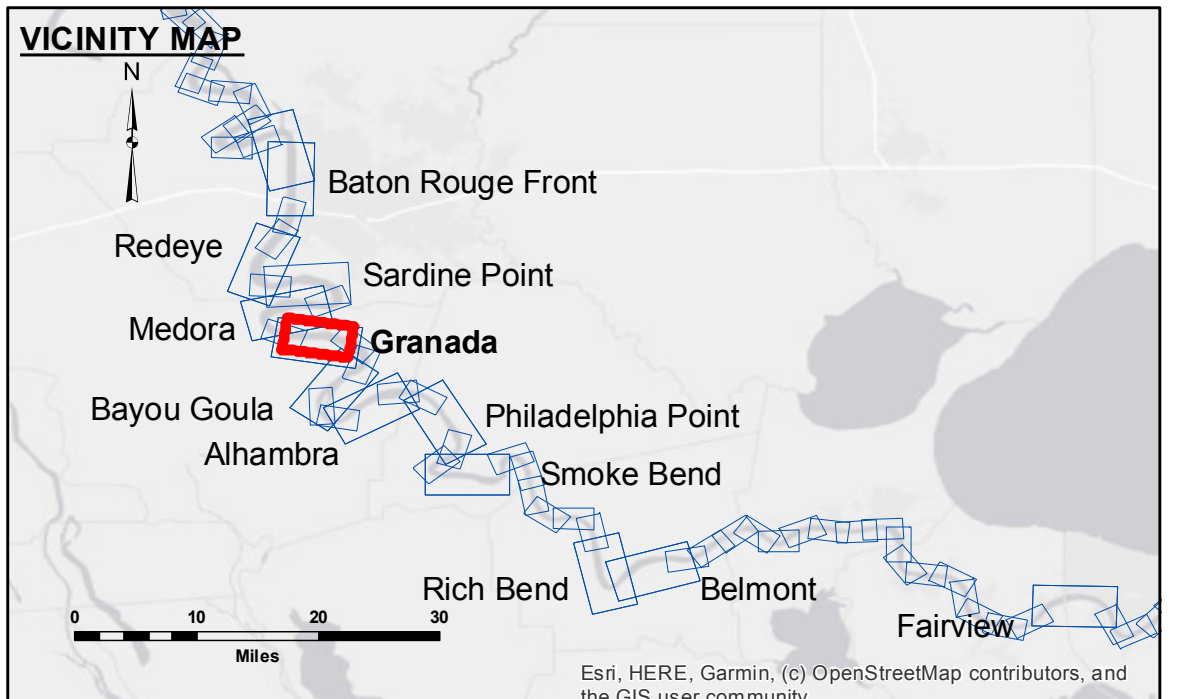


US Army Corps of Engineers District: CEMVN

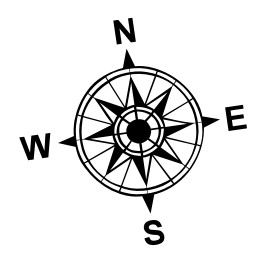
Disclaimer: The data represents the results of data collection/processing for a specific US Army Corps of Engineers project and is only valid for the intended use, contract, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose is not warranted. The user is responsible for the results. Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, channel migration, sedimentation, and changes in bathymetry. The information depicted on this map represents the results of a survey and is not intended to be used as a substitute for a site visit or for engineering purposes. The information depicted on this map represents the results of a survey and is not intended to be used as a substitute for a site visit or for engineering purposes.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: ADAMS/MOLLERE
Recommended:	Plotted By: BD
Approved:	Checked By: AC

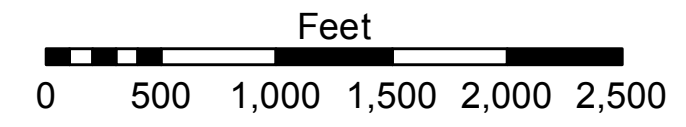
**MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
MD_10_GRA_20220617_CS
17 June 2022**



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:27.4 D:18.0 USED:23.10 NAVD
 Sea Conditions: CALM
 Vessel Name: OB-167
 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 (NAVD).

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.
 2015 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 fathometer settings.

**Sheet
Reference
Number
10 of 97**