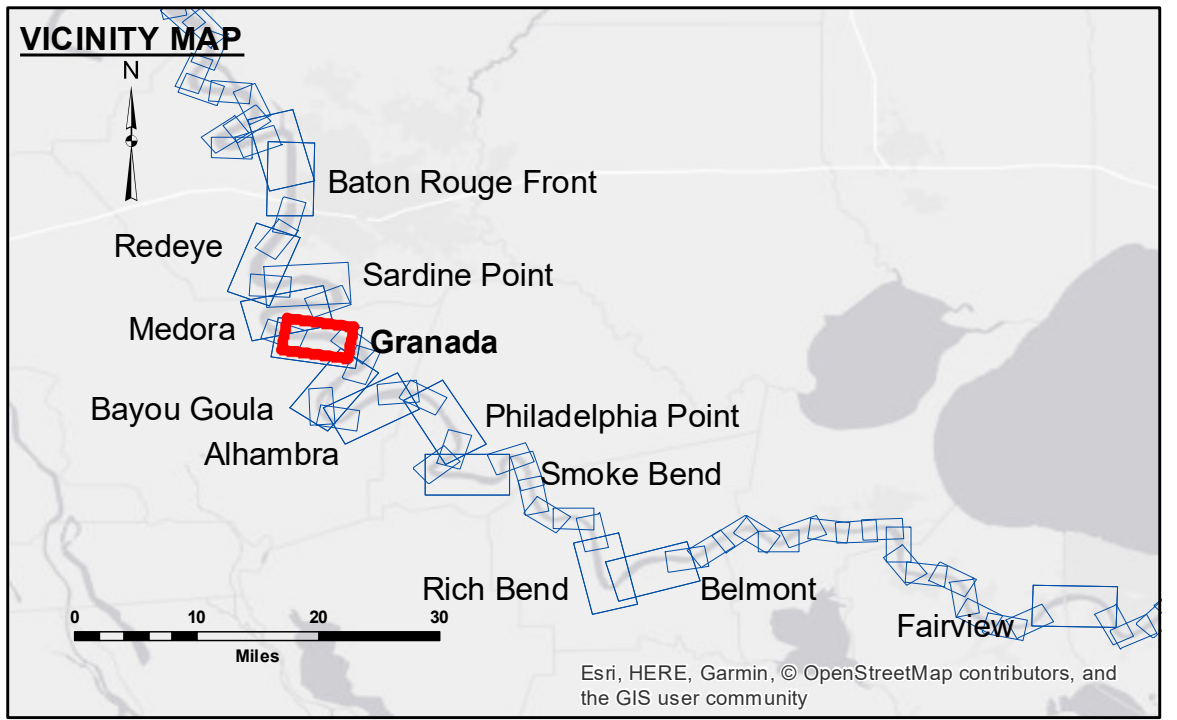


DISCLAIMER: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that they are for informational purposes only and are not to be used for any purpose other than that for which they were provided. The user is responsible for the results of any use of the data for other than its intended purpose. The application of the data for other than its intended purpose may result in injury or death. The user is responsible for the results of any use of the data for other than its intended purpose. The application of the data for other than its intended purpose may result in injury or death. The user is responsible for the results of any use of the data for other than its intended purpose.

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

**MISSISSIPPI RIVER - B. R. TO GULF
GRANADA RECON
MR_10_GRA_20180830_CS
30 August 2018**



LEGEND	
--- Federal Navigation Channel	● Cable Area
— Federal Navigation Center Line	■ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	✶ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
◆ Green Navigation Buoy	◆ Green Navigation Buoy

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.

2015 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.

LWRP: 1.9
Gage Reading: BR:12.5D:7.0 USED:10.0 NGVD
Sea Conditions: CALM
Vessel Name: M/V OB 167
Survey Type: CONDITION
Sounding Frequency***: HIGH

**Sheet Reference Number
10 of 97**