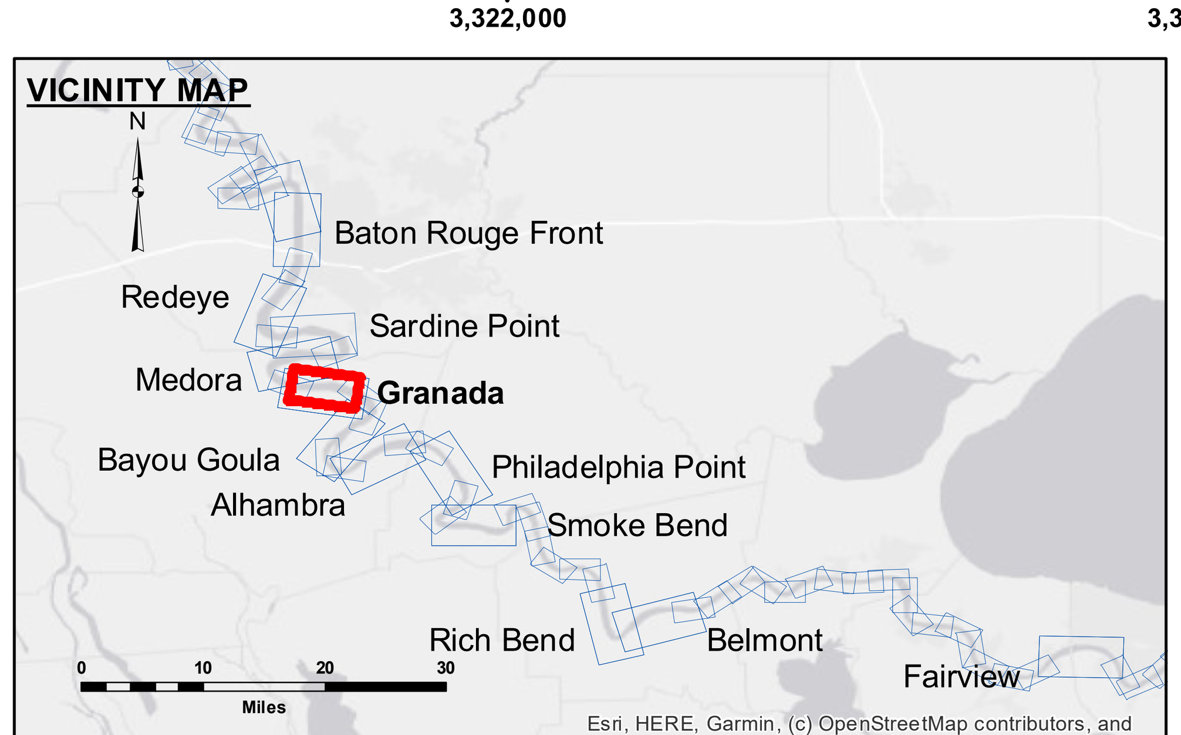

LEGEND

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

LWRP:	1.9
Gage Reading:	BR:28.6 D:19.5 USED:24.5 NAVD
Sea Conditions:	CONDITION
Vessel Name:	OB-189
Survey Type:	CONDITION
Sounding Frequency***:	HIGH

Feet

0 500 1,000 1,500 2,000 2,500

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 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.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 consoldiated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer settings.

US Army Corps of Engineers
District: CEMVN

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The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered to represent the general condition existing at that time.

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Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging activity and natural shoaling and scouring processes. The U. S. Army Corps of Engineers accepts no responsibility for changes in the hydrographical conditions which develop after the date of publication. This data is intended for U. S. Army Corps of Engineers' internal use. Prudent mariners should not rely solely upon it.

Surveyed By: DJS/JDH

Plotted By: BD

Checked By: AO

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

Submitted: Chief, Survey Section

Recommended:

Approved: Chief, Waterways Maintenance Section

MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
MD_10_GRA_20191216_CS
16 December 2019

Sheet Reference Number
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