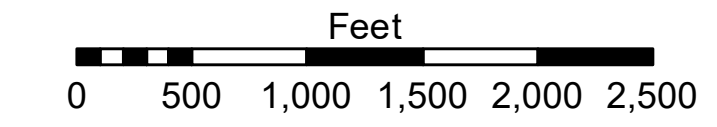
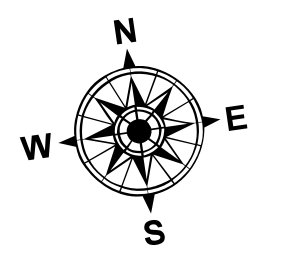


| LEGEND | | | |
|--------|--------------------------------|--|-----------------------|
| | Federal Navigation Channel | | Cable Area |
| | Federal Navigation Center Line | | Placement Area |
| | As-built Pipeline/Cable | | Borrow Area |
| | Unconfirmed Pipeline/Cable | | Shoalest Sounding** |
| | Project Depth Contour | | Beacon, General |
| | Obstruction Point | | Red Navigation Buoy |
| | Wrecks-Submerged | | 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 | | -45' and below |



LWRP: 1.9
 Gage Reading: BR:25.3 D:15.8 USED:21.00 NAVD
 Sea Conditions: CALM
 Vessel Name: OB-167
 Survey Type: CS
 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 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.

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

**MISSISSIPPI RIVER - B.R. TO GULF
 GRANADA CROSSING
 MD_10_GRA_20210710_CS
 10 July 2021**

**Sheet
 Reference
 Number
 10 of 97**

Revision Number:
4.1-20191105

US Army Corps of Engineers District: CEMVN

DISCLAIMER: The data represented on this map represents the results of a collection of data for a specific project. The data is not intended to be used for any purpose other than that for which it was collected. The user is responsible for the results of any use of this data. The data is not intended to be used for any purpose other than that for which it was collected. The user is responsible for the results of any use of this data.