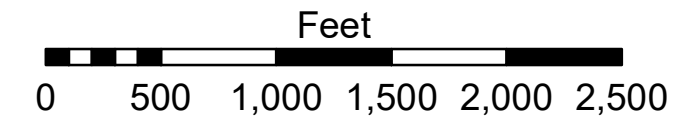
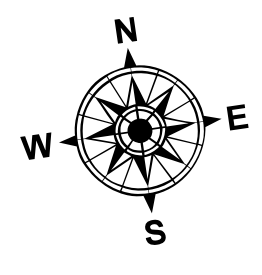
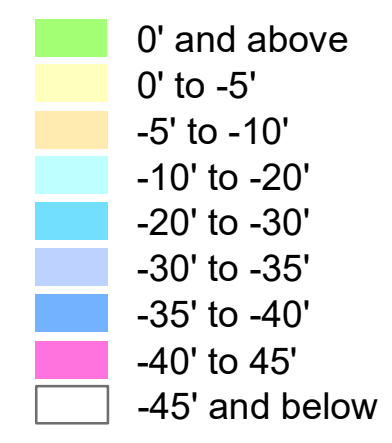


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red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



LWRP: 1.9  
 Gage Reading: BR:20.8D:12.6 USED: 17.1 NAVD  
 Sea Conditions: CALM  
 Vessel Name: M/V VALENTOUR  
 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 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.



**DISCLAIMER:**  
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were originally collected, and that the data are not to be used for any purpose other than that for which they were originally collected, and that the data are not to be used for any purpose other than that for which they were originally collected.

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

**MISSISSIPPI RIVER - B.R. TO GULF**  
**GRANADA CROSSING**  
 MD\_10\_GRA\_20191024\_CS  
 24 October 2019

**Sheet Reference Number**  
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Revision Number:  
 4:10-2019012