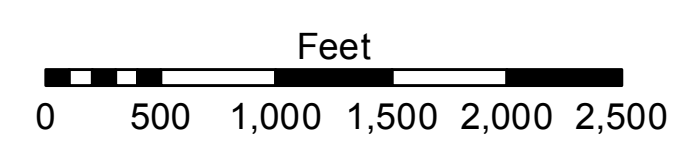
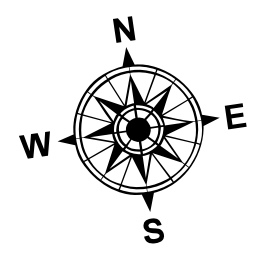


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
★ Beacon, General	◆ Green Navigation Buoy
◆ Red Navigation Buoy	0' and above
◆ Green Navigation Buoy	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:30.8 D:20.7 USED:26.20 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 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. 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 Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results. The user shall indemnify and hold the Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, that may be incurred by the Government or any other party as a result of the use of the information. The information depicted on this map represents the results of a survey conducted on the Mississippi River. The information is for internal use only and should not be used for any other purpose.

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

**MISSISSIPPI RIVER - B.R. TO GULF  
 GRANADA CROSSING  
 MD\_10\_GRA\_20220421\_CS  
 21 April 2022**

**Sheet  
 Reference  
 Number  
 10 of 97**