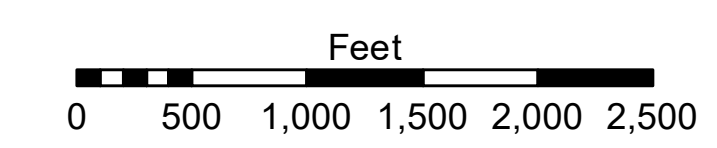
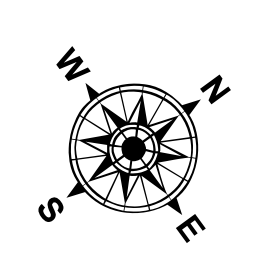


LEGEND			
--- Federal Navigation Channel	● Cable Area	□ Borrow Area	■ 0' and above
— Federal Navigation Center Line	■ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -5' to -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red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



LWRP: 1.8
 Gage Reading: BR:24.0 D:15.1 USED:18.9 NAVD
 Sea Conditions: CALM
 Vessel Name: MV 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 data represents the results of data collection performed for a specific US Army Corps of Engineers project. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is not recommended. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is not recommended. The user is responsible for the results and accuracy of the data. The application of the data for other than its intended purpose is not recommended.

Submitted:	SP:JA
Recommended:	BD
Approved:	AC

**MISSISSIPPI RIVER - B.R. TO GULF
 BAYOU GOULA CROSSING
 MD_13_GOU_20191031_CS
 31 October 2019**

**Sheet Reference Number
 13 of 97**

Revision Number:
 4.0-20190702