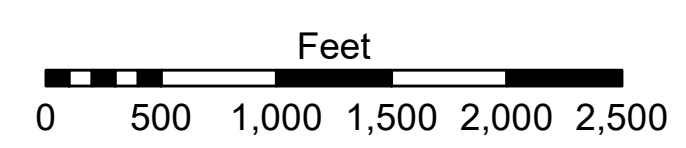
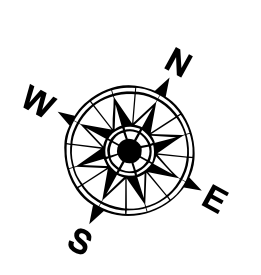


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	♦ Red 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: 1.7
 Gage Reading: BR:18.8D:11.1 USED:13.3 NGVD
 Sea Conditions: SMOOTH
 Vessel Name: OB189
 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 (NGVD).
 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.
 2010 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 information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, and reliability of the information for the intended purpose. The user is responsible for the accuracy, completeness, and reliability of the information for the intended purpose. The user is responsible for the accuracy, completeness, and reliability of the information for the intended purpose.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: DS/SR
Recommended: Chief, Survey Section	Plotted By: AO
Approved: Chief, Waterways Maintenance Section	Checked By: AO

**MISSISSIPPI RIVER - B. R. TO GULF
 ALHAMBRA RECON
 MR_16_ALH_20180626_CS
 26 June 2018**

**Sheet Reference Number
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