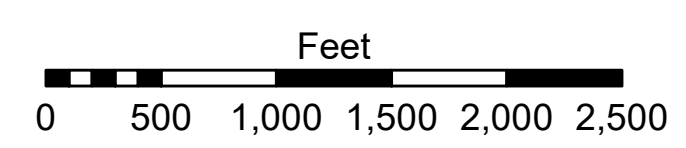
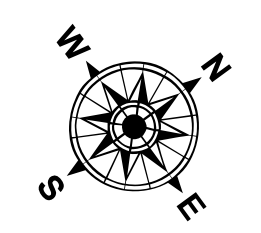


LEGEND

--- 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:18.8D:11.1 USED:14.4 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 United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not warranted for any purpose other than that for which they were prepared, and that the user is responsible for the accuracy, completeness, reliability, usability or suitability for any particular purpose of the data. The user shall not be held liable for any damage or injury, or for any loss of property, or for any liability whatsoever to any person by reason of any use of the data, or for any claim, action, or damage, or for any loss of property, or for any liability whatsoever to any person by reason of any use of the data, or for any claim, action, or damage, or for any loss of property, or for any liability whatsoever to any person by reason of any use of the data, or for any claim, action, or damage, or for any loss of property, or for any liability whatsoever to any person by reason of any use of the data.

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

**MISSISSIPPI RIVER - B.R. TO GULF
 BAYOU GOULA RECON
 MR_13_GOU_20180626_CS
 26 June 2018**

**Sheet
 Reference
 Number
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