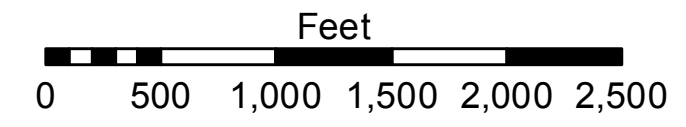
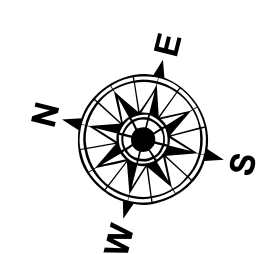


LEGEND	
--- Federal Navigation Channel	● Cable Area
— Federal Navigation Center Line	■ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red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

0' and above	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: 1.3
 Gage Reading: D:21.9 R:18.6 USED: 20.4 NGVD
 Sea Conditions: ROUGH
 Vessel Name: OB-189
 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 (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.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 bathymeter settings.



Access to Information: 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. The user is responsible for the results of any use of the data for other than its intended purpose. Data contained in this report are subject to change without notice and are not to be used for any purpose other than that for which they were originally collected. The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers and is not to be used for any purpose other than that for which it was collected. The user is responsible for the results of any use of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Checked By: MSK
Recommended:	Checked By: MSK
Approved:	Checked By: MSK

**MISSISSIPPI RIVER - B.R. TO GULF
 RICH BEND RECON
 MR_29_RIB_20160418
 18 April 2016**

**Sheet
 Reference
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