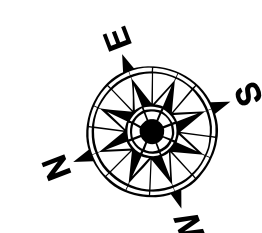


LEGEND			
--- Federal Navigation Channel	● Cable Area	□ Borrow Area	■ -10' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -10' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -20' to -30'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -30' to -40'
— Project Depth Contour	★ Wrecks-Submerged	◆ Green Navigation Buoy	■ -40' to -45'
			■ -45' to -48.5'
			■ -48.5' to -55'
			■ -55' and below



Gage Reading: 0.90 MLLW @ MILE 17.9 @ 1155  
 Sea Conditions: CALM  
 Vessel Name: JOHN BOPP  
 Survey Type: CONDITION, SB  
 Sounding Frequency\*\*\*: LOW



**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 Mean Lower Low Water (MLLW, 07-11). Datum Relationships for gage 01670 as of July 2015: 0.0' NAVD86 = 0.68' MLLW = 4.18' MLG  
 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.  
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green)  
 Reference is N.O.A. Navigation Chart No. 11361.  
 \*\* 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 (24 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 obtained from the use of this information. The user is responsible for the results obtained from the use of this information. The user is responsible for the results obtained from the use of this information. The user is responsible for the results obtained from the use of this information.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	JH & RCC
Recommended:	TSS
Checked By:	MSK

**MISSISSIPPI RIVER - B.R. TO GULF  
 SOUTHWEST PASS - SHEET 13  
 SW\_13\_SWP\_20210114\_CS  
 14 January 2021**

**Sheet Reference Number  
 13 of 13**

Revision Number:  
 4.1-20191105