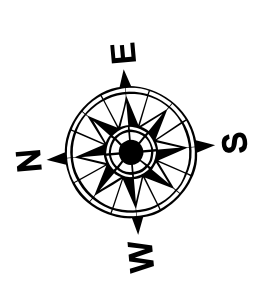


LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy



Gage Reading: HACKBERRY: 2.6 MLLW
 Sea Conditions: CHOPPY
 Vessel Name: OB-169
 Survey Type: CONDITION
 Sounding Frequency***: LOW

Feet
 0 400 800 1,200 1,600

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 Datum (MLLW). Datum Relationships for gage 73600 as of December 2013: 0.0' NAVD88 (OPUS 2010) = 1.0' MLLW = 2.0' MLG or 0.0' MLLW = 1.0' MLG
 Distances on the Calcasieu River are shown at 1 mile intervals.
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE survey crews.
 2015 Aerial Photography data source: NAIP
 Reference is N.O.A. Navigation Chart No. 11339.
 * Difference between high and low frequency elevations where greater than 1.0'.
 ** 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.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	SPDS
Recommended:	BD
Checked By:	AC

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 14
 CR_14_LWR_20200831_CS_POSTSTORM
 31 August 2020**

**Sheet Reference Number
 14 of 53**

Revision Number:
 4.1-20191105

**US Army Corps of Engineers
 District: CEMVN**

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 accuracy, reliability, usability, or availability for any particular purpose of the recipient. The user is responsible for the results. The user shall not be held liable for any damages, including but not limited to, direct, indirect, or consequential damages, arising from the use of the data for other than its intended purpose. The application of the data for other than its intended purpose is at the user's risk. The user shall not be held liable for any damages, including but not limited to, direct, indirect, or consequential damages, arising from the use of the data for other than its intended purpose. The application of the data for other than its intended purpose is at the user's risk.

DIST. LIMITATIONS: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, shoaling, and other changes in the channel. The user shall not be held liable for any damages, including but not limited to, direct, indirect, or consequential damages, arising from the use of the data for other than its intended purpose. The application of the data for other than its intended purpose is at the user's risk.

INTERNAL USE: Product maintainers should not rely solely upon this information depicted on the map represents the results of a field survey. The information is not intended to be used as a substitute for a field survey. The information is not intended to be used as a substitute for a field survey. The information is not intended to be used as a substitute for a field survey.