



LEGEND

--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	-16' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-16' to -21'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	-21' to -26'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	-26' to -33'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	-33' to -39'
			-39' to -41'
			-41' to -43'
			-43' and below

Gage Reading: HACKBERRY 1.73 MLLW AVG.
 Sea Conditions: CALM
 Vessel Name: OB-169
 Survey Type: CONDITION
 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 Datum (MLLW).
 Datum Relationships for gage 73600 as of December 2013:
 0.0' NAVD83 (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: _____
 Recommended: _____
 Approved: _____

Surveyed By: RYLAND/MOLLERE
 Plotted By: BD
 Checked By: AC

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 14
 CR_14_LWR_20210615_CS
 15 June 2021**

**Sheet Reference Number
 14 of 53**

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

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 Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, sedimentation, and changes in channel conditions. The user is responsible for the data and its application. The Army Corps of Engineers accepts no responsibility for change in the hydrographic conditions which develop after the date of the survey. The user is responsible for the data and its application. The user is responsible for the data and its application. The user is responsible for the data and its application.
 The information depicted on this map represents the results of a survey conducted on the date indicated. The user is responsible for the data and its application. The user is responsible for the data and its application. The user is responsible for the data and its application.