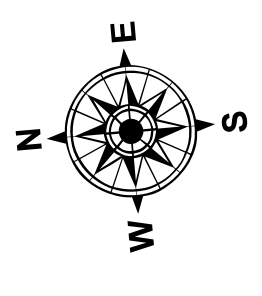


LEGEND

--- 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: NTRIP VRS RTK: 1.67 MLLW AVG.
 Sea Conditions: CALM
 Vessel Name: M/V TECHE
 Survey Type: CONDITION
 Sounding Frequency***: LOW

Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).
 Datum Relationships for gage 73615 as of December 2013:
 0.0' NAVD86 (2009.55) = 1.1' MLLW = 2.1' 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.

2022 Aerial Photography data source: PAR LLC
 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.



DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The data represents the results of data collection for a specific US Army Corps of Engineers project and is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose.
 Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, sedimentation, and other channel conditions. The user is responsible for the hydrographic conditions when developing after the date of the survey. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: SP-JS
Recommended:	Plotted By: BD
Checked:	Checked By: AC

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 20
 CR_20_LWR_20230612_CS
 12 June 2023**

**Sheet Reference Number
 20 of 53**

Revision Number:
 4.2-202/064 20