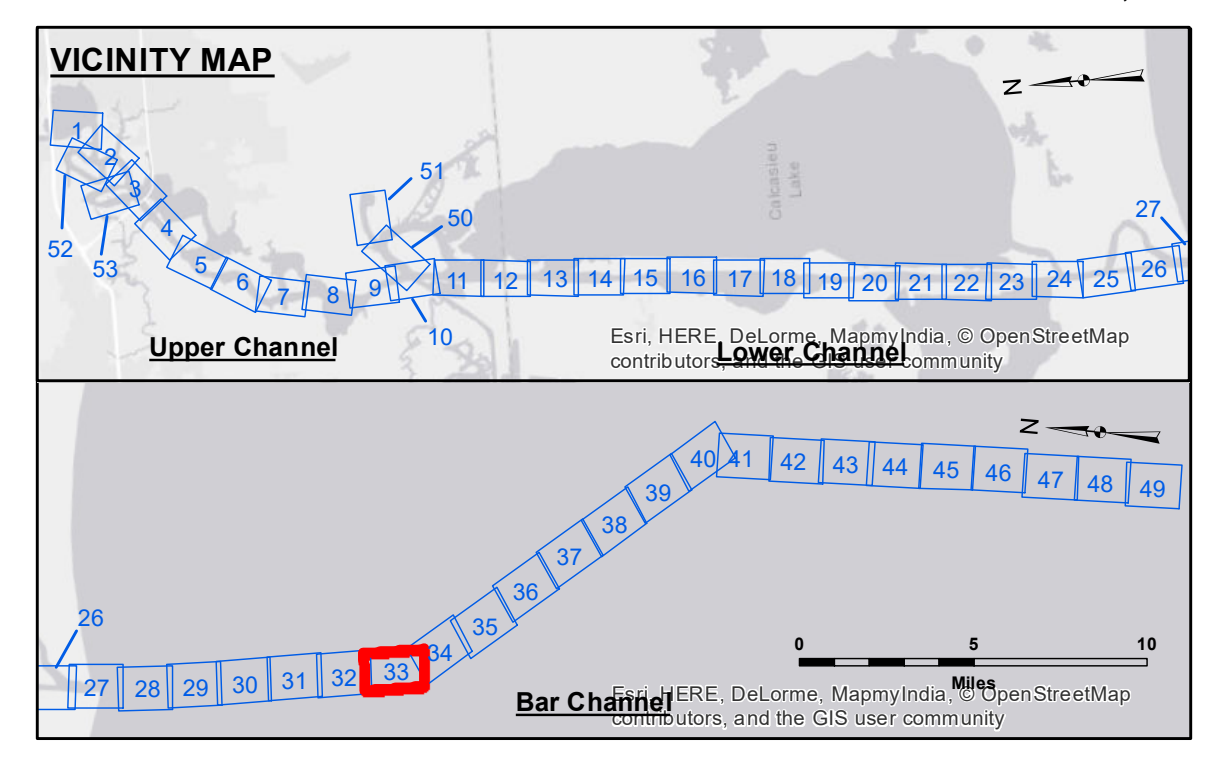


DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were prepared, or in any way that may constitute a derogation of the accuracy, completeness, reliability, usability or suitability for any particular purpose of the data. The recipient understands that the data are provided under no liability whatsoever to any person by reason of any use of the data, and that the recipient shall be responsible for any damage or injury resulting from the use of the data. The recipient may not transfer these data to others without also transferring this Disclaimer. The information depicted on this map represents the results of a hydrographic survey which was conducted in accordance with the standards and procedures of the U.S. Army Corps of Engineers and is not to be used for any purpose other than that for which it was prepared. The recipient understands that the data are provided under no liability whatsoever to any person by reason of any use of the data, and that the recipient shall be responsible for any damage or injury resulting from the use of the data. The recipient may not transfer these data to others without also transferring this Disclaimer.

Submitted:	Surveyed By: SPS JH	Plotted By: AO	Checked By: AO
Recommended:	Chief, Survey Section		
Approved:	Chief, Waterways Maintenance Section		

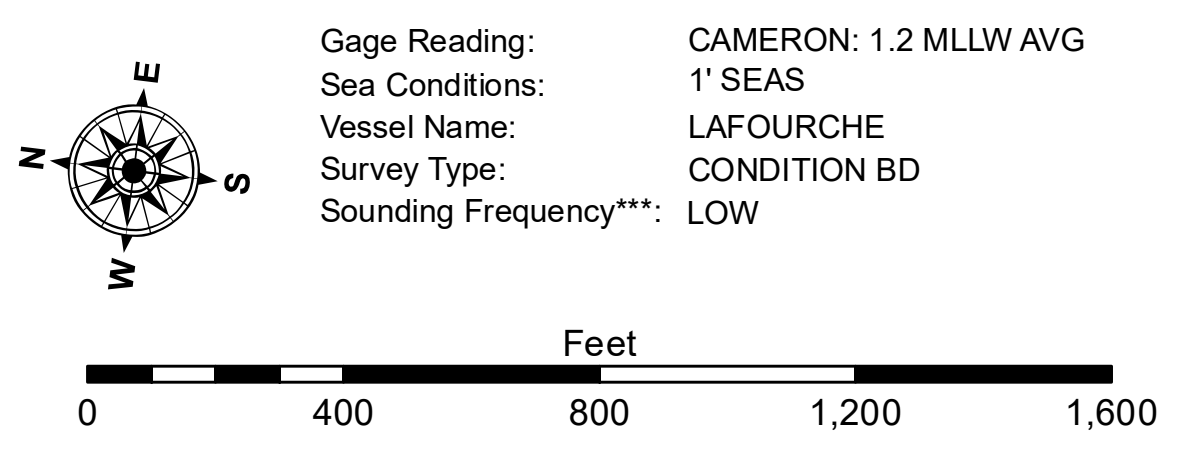
CALCASIEU SHIP CHANNEL
BAR SHEET 33
CR_33_BAR_20180724_CS
24 July 2018

Sheet Reference Number
33 of 53



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



NOTES: 416,000
 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 73650 as of December 2013: 0.0' NAVD88 (2009.55) = 1.3' MLLW = 2.3' 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 based on and provided by the U.S. Coast Guard and USACE survey crews.
 2015 Aerial Photography data source: NAIP
 Reference is N.O.A.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.