

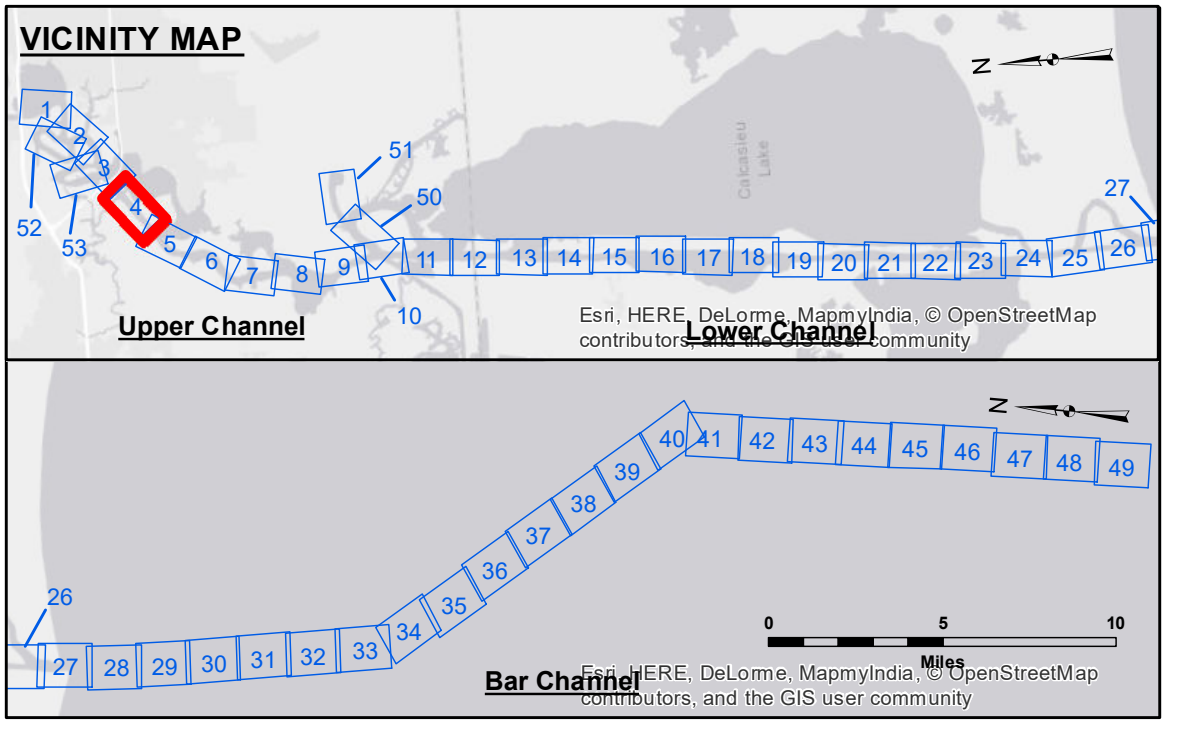
DISCLAIMER: The information depicted on this map represents the results of a hydrographic survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, reliability, usability, or suitability of the data for any purpose other than that intended. The user is responsible for the accuracy, reliability, usability, or suitability of the data for any purpose other than that intended. The user is responsible for the accuracy, reliability, usability, or suitability of the data for any purpose other than that intended.

Submitted:	Surveyed By:	SPS:JH
Recommended:	Plotted By:	BD
Approved:	Checked By:	AC

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
UPPER SHEET 4
CR_04_UPR_20180501_CS
01 May 2018**

**Sheet Reference Number
4 of 53**



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
		■ -16' and above
		■ -16' to -21'
		■ -21' to -26'
		■ -26' to -33'
		■ -33' to -39'
		■ -39' to -41'
		■ -41' to -43'
		■ -43' and below

Gage Reading: DM 114: 1.40 MLLW
Sea Conditions: 1'
Vessel Name: M/V LAFOURCHE
Survey Type: CONDITION
Sounding Frequency*:** LOW

Vertical Datum: 0.0 NAVD88 (OPUS 2013) = 0.6' MLLW = 1.6' 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. 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.

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: 0.0 NAVD88 (OPUS 2013) = 0.6' MLLW = 1.6' MLG or 0.0' MLLW = 1.0' MLG
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