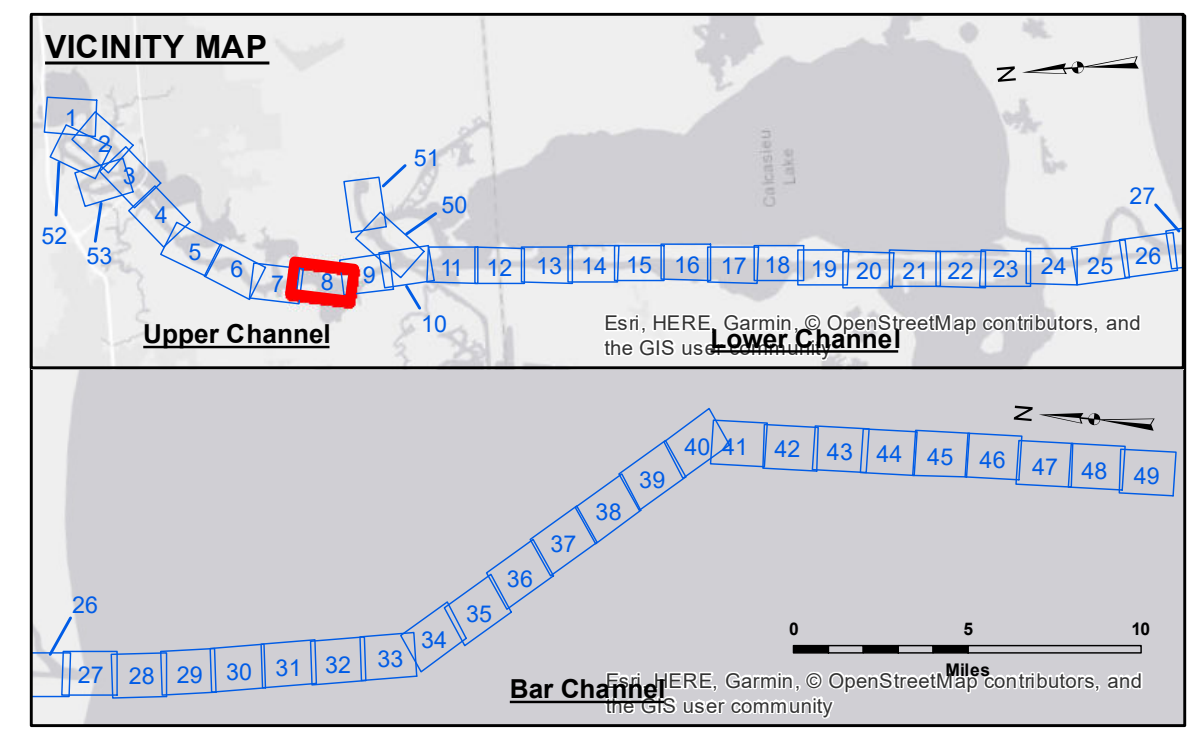


Distribution Liability: The data represents the results of a collection of data for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results. Application of the data for other than its intended purpose. Data Constants: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, sedimentation, and other factors. The user is responsible for changes in the hydrographical conditions when developing after the date of the survey. The information depicted on this map represents the results of a survey and is not intended to be used as a substitute for a detailed survey. The information is provided for informational purposes only and should not be used for any other purpose.

Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
UPPER SHEET 8
CR_08_UPR_20180919_CS
19 September 2018**



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:

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 73575 as of December 2013:
0.0' NAVD88 (OPUS 2013) = 0.8' MLLW = 1.8' 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.

Gage Reading: RANGE E: 1.6 MLLW
Sea Conditions: CALM
Vessel Name: OB-167
Survey Type: CONDITION
Sounding Frequency***: LOW

**Sheet Reference Number
8 of 53**