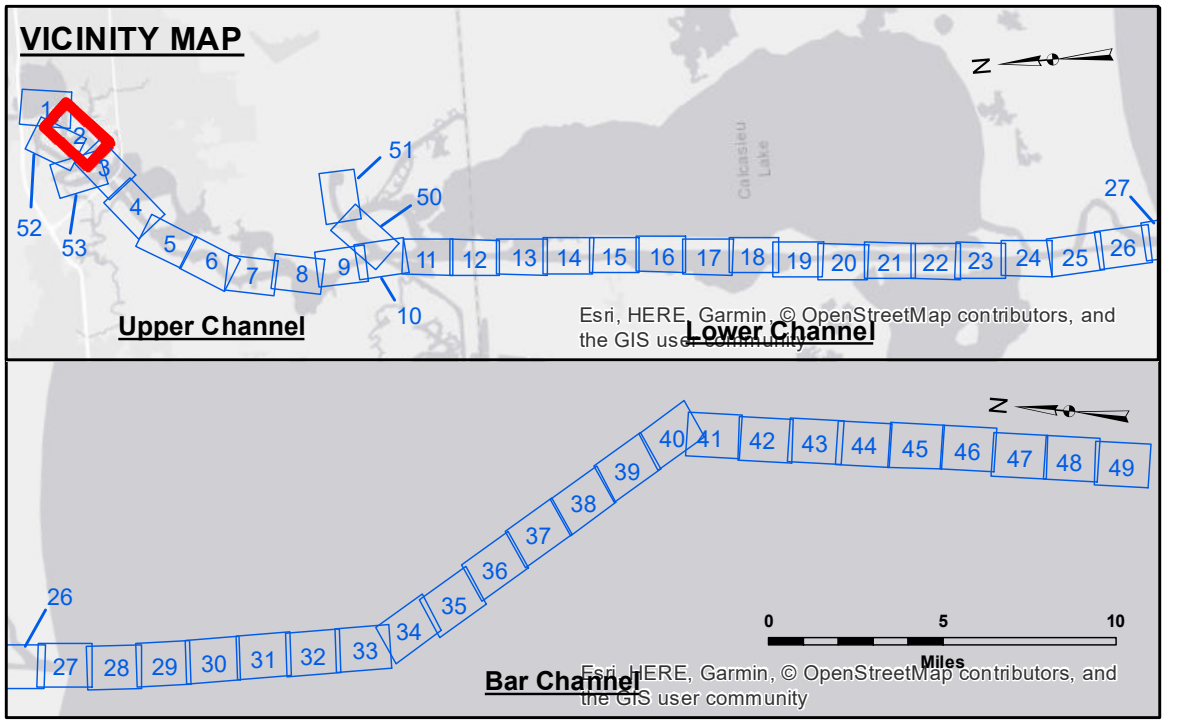


DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The user of this information is advised that it is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the accuracy, completeness, and reliability of the information for any particular purpose of the user. The user is advised that the information is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the accuracy, completeness, and reliability of the information for any particular purpose of the user. The user is advised that the information is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the accuracy, completeness, and reliability of the information for any particular purpose of the user.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: DS, JH	Plotted By: AO
Recommended:	Checked By: AO	Checked By: AO
Approved:	Chief, Waterways Maintenance Section	

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 2
 CR_02_UPR_20180919_CS
 19 September 2018**



LEGEND	
--- Federal Navigation Channel	● Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
3 Fluff Thickness (feet)*	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
◆ Green Navigation Buoy	

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 73550 as of December 2013:
 0.0' NAVD88 (OPUS 2010) = 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 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.

Gage Reading: LAKE CHARLES: 1.4 MLLW
 Sea Conditions: CALM
 Vessel Name: OB-167
 Survey Type: CONDITION
 Sounding Frequency***: LOW

0 400 800 1,200 1,600 Feet

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.
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 * 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.

**Sheet Reference Number
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