

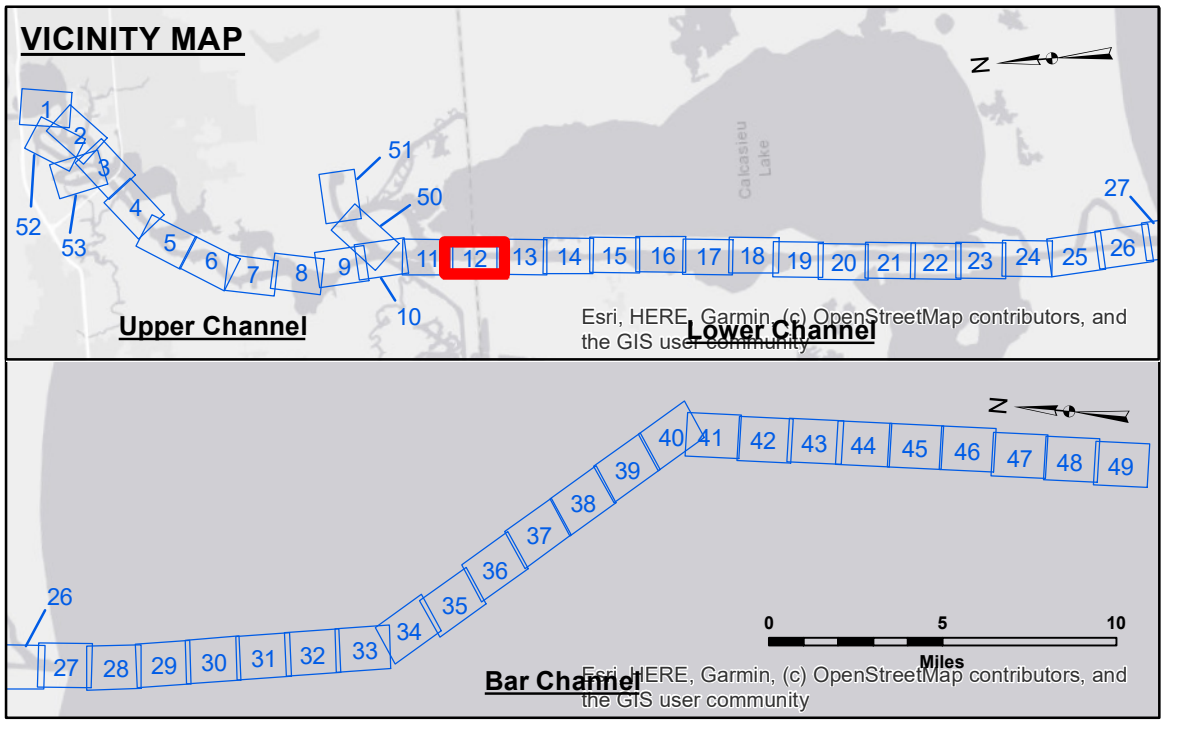
DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were originally prepared, and that the user is responsible for the results of any use of the data for other than the intended purpose.
 Data Constraints: Hydrographic survey data is subject to change due to several factors including but not limited to changing hydrographic conditions, changes in bathymetry, and changes in the hydrographic conditions which develop after the date of the survey. The user is responsible for the results of any use of the data for other than the intended purpose.
 The information depicted on this map represents the results of a survey conducted on or about the date shown on the map. It is considered to represent the general condition existing at that time.

Submitted:	Surveyed By: SP/DS
Recommended:	Plotted By: AO
Approved:	Checked By: AO

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 12
 CR_12_LWR_20191127_CS
 27 November 2019**

**Sheet Reference Number
 12 of 53**



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	◆ 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 73595 as of December 2013:
 0.0' NAVD83 (OPUS 2013) = 0.9' MLLW = 1.9' 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.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: DM86: 1.75 MLLW
 Sea Conditions: CHOP
 Vessel Name: OB-167
 Survey Type: CONDITION
 Sounding Frequency***: LOW

Scale: 0 to 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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 ** 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.