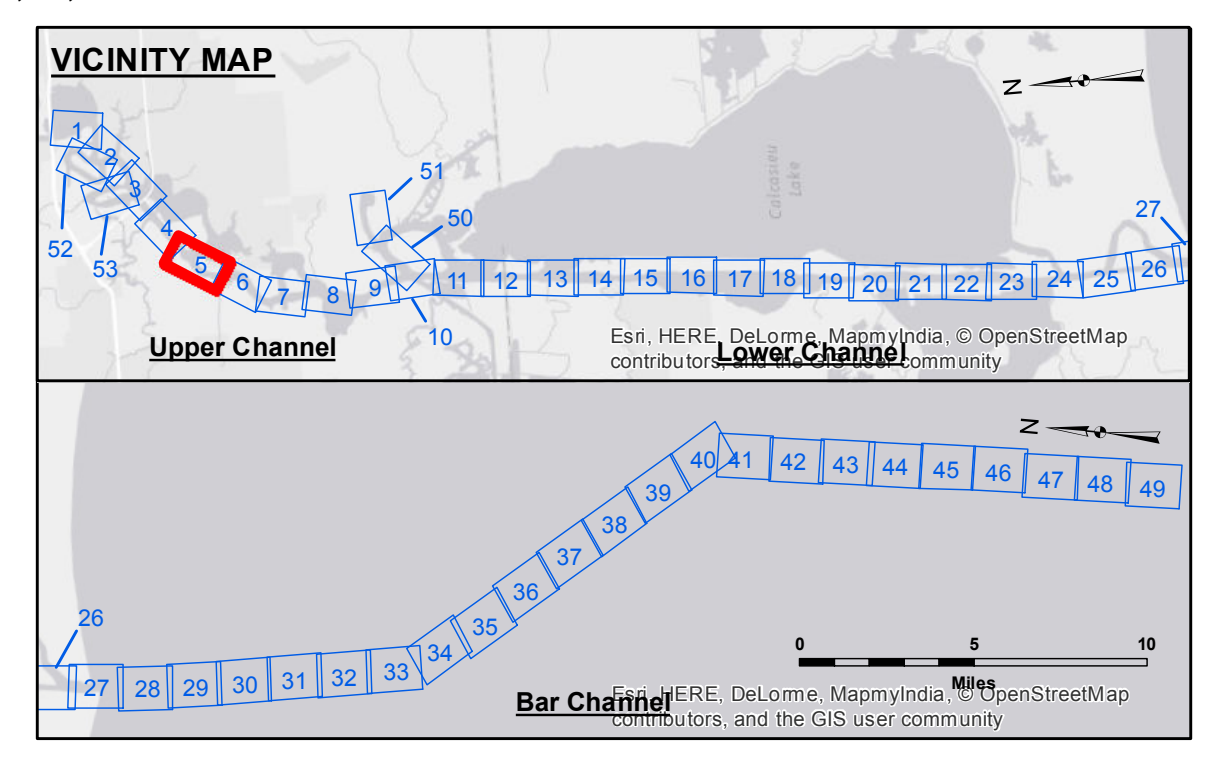


DISTRIBUTION LIABILITY: The data represents the results of data collection for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose. Distribution Liability: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, sedimentation, and other channel conditions. The user is responsible for the hydrographic conditions when developing after the date of the survey. The information depicted on this map represents the results of a survey conducted on the general condition existing at that time. The user is responsible for the results of any application of the data for other than its intended purpose.

Submitted:	Surveyed By: SUR_JDH
Recommended:	Plotted By: BD
Approved:	Checked By: AC

**CALCASIEU SHIP CHANNEL
UPPER SHEET 5
CR_05_UPR_20161003
03 October 2016**



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 Low Gulf Datum (MLG). Datum Relationships for gage 73565 as of December 2013: 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 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.
 *** 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: DM 114: 1.8 MLG
 Sea Conditions: CALM
 Vessel Name: M/V TECHE
 Survey Type: CONDITION
 Sounding Frequency***: LOW

Feet
 0 400 800 1,200 1,600

**Sheet Reference Number
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