

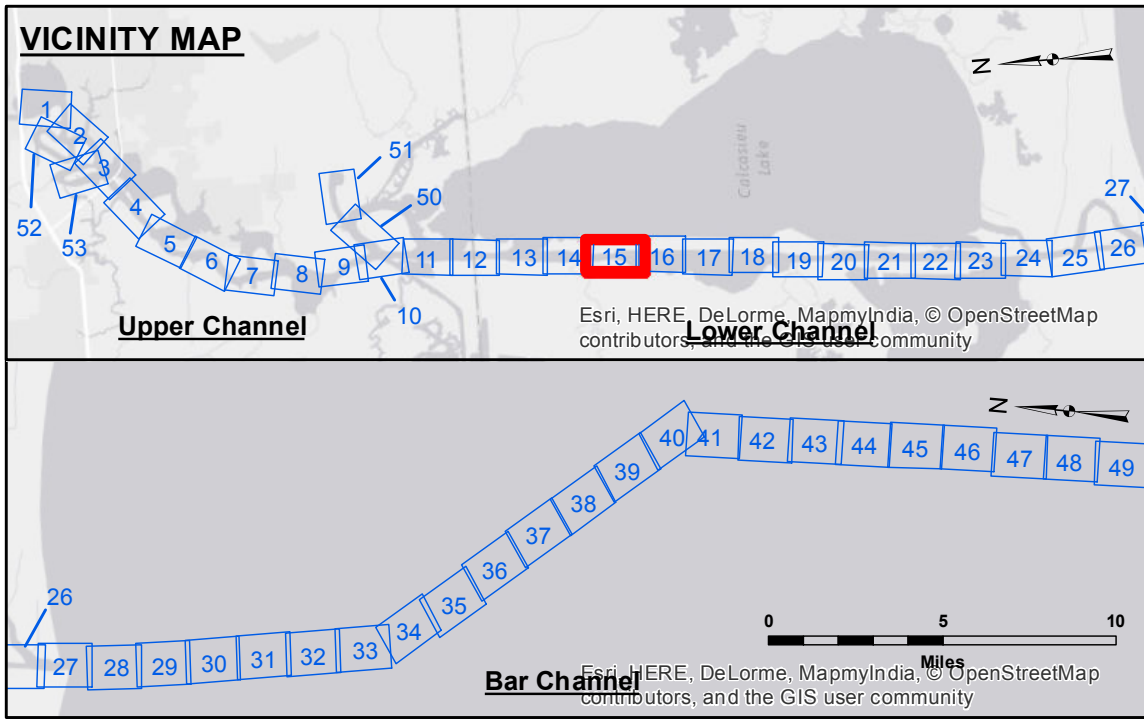
DISCLAIMER
The data represented on this map is the result of data collection for a specific US Army Corps of Engineers project. It is not intended for use for any other purpose. The user is responsible for the accuracy, completeness, and timeliness of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

ACCESS LIMITS
The information depicted on this map represents the results of a survey conducted by the United States Government. It is not intended for use for any other purpose. The user is responsible for the accuracy, completeness, and timeliness of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

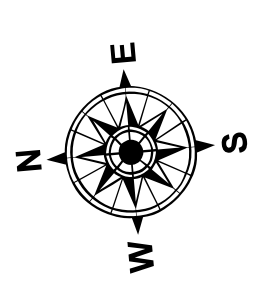
Submitted:	Surveyed By:	JA, JH
Recommended:	Plotted By:	BTD
Approved:	Chief, Survey Section	TAF
	Chief, Waterways Maintenance Section	

**CALCASIEU SHIP CHANNEL
LOWER SHEET 15
CR_15_LWR_20160120
20 January 2016**

**Sheet Reference Number
15 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
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
★ Beacon, General	◆ Green Navigation Buoy
◆ Red Navigation Buoy	
◆ Green Navigation Buoy	



Gage Reading: HACKBERRY: 2.6 MLG
Sea Conditions: CALM
Vessel Name: MV TECHE
Survey Type: CONDITION
Sounding Frequency***: LOW

Vertical Datum: 0.0' NAVD88 (OPUS 2010) = 1.0' MLLW = 2.0' 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.

2010 Aerial Photography data source: NAIP
Reference is N.O.A. Navigation Chart No. 11339.

*** 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 2010) = 1.0' MLLW = 2.0' MLG or 0.0' MLLW = 1.0' MLG
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