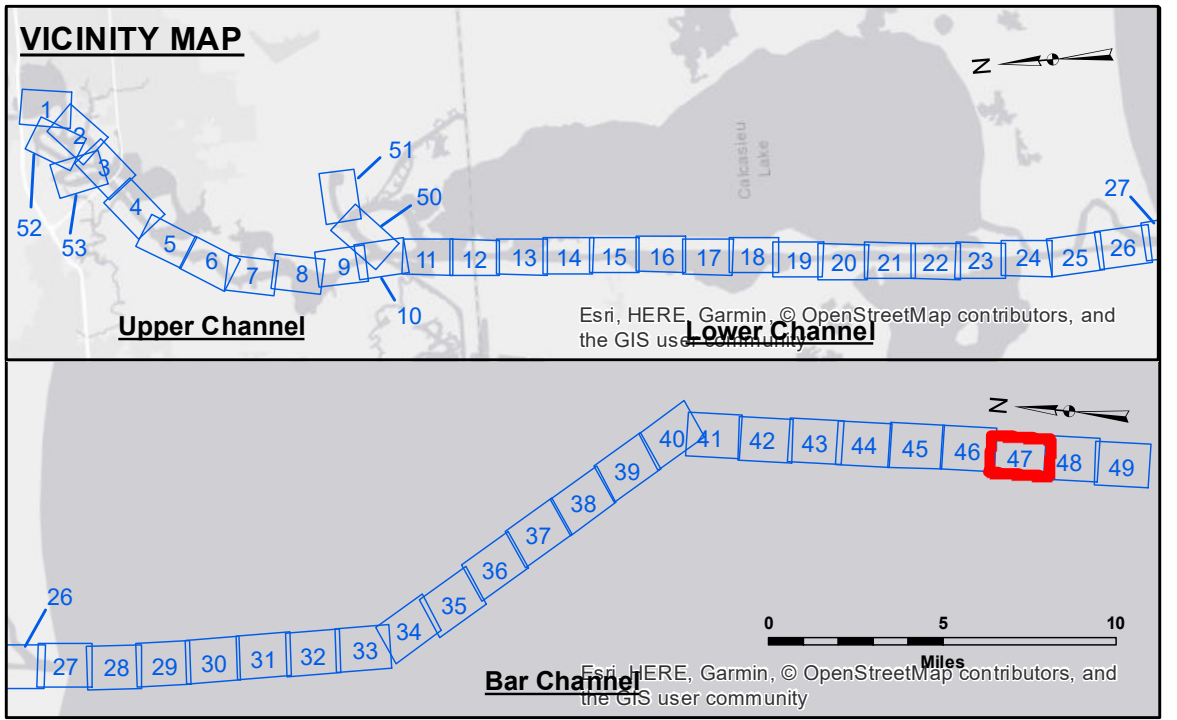


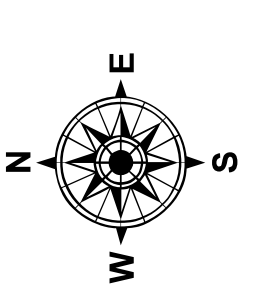
DISCLAIMER
 The information depicted on this map represents the results of a hydrographic survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, and reliability of the data for any particular purpose of the user. The user is responsible for the accuracy, completeness, and reliability of the data for any particular purpose of the user. The user is responsible for the accuracy, completeness, and reliability of the data for any particular purpose of the user. The user is responsible for the accuracy, completeness, and reliability of the data for any particular purpose of the user.

Submitted:	Surveyed By: SPS/JH	Plotted By: BD	Checked By: AC
Recommended:	Chief, Survey Section		
Approved:	Chief, Waterways Maintenance Section		

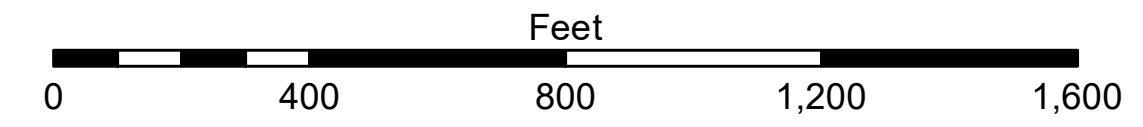
CALCASIEU SHIP CHANNEL
BAR SHEET 47
CR_47_BAR_20170911_CS_POSTSTORM
11 September 2017



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



Gage Reading: CAMERON: 1.52 MLLW
 Sea Conditions: 2-4'
 Vessel Name: M/V TECHE
 Survey Type: CONDITION
 Sounding Frequency***: LOW



NOTES:
 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 73650 as of December 2013: 0.0' NAVD88 (2009.55) = 1.3' MLLW = 2.3' 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.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.

Sheet Reference Number
47 of 53