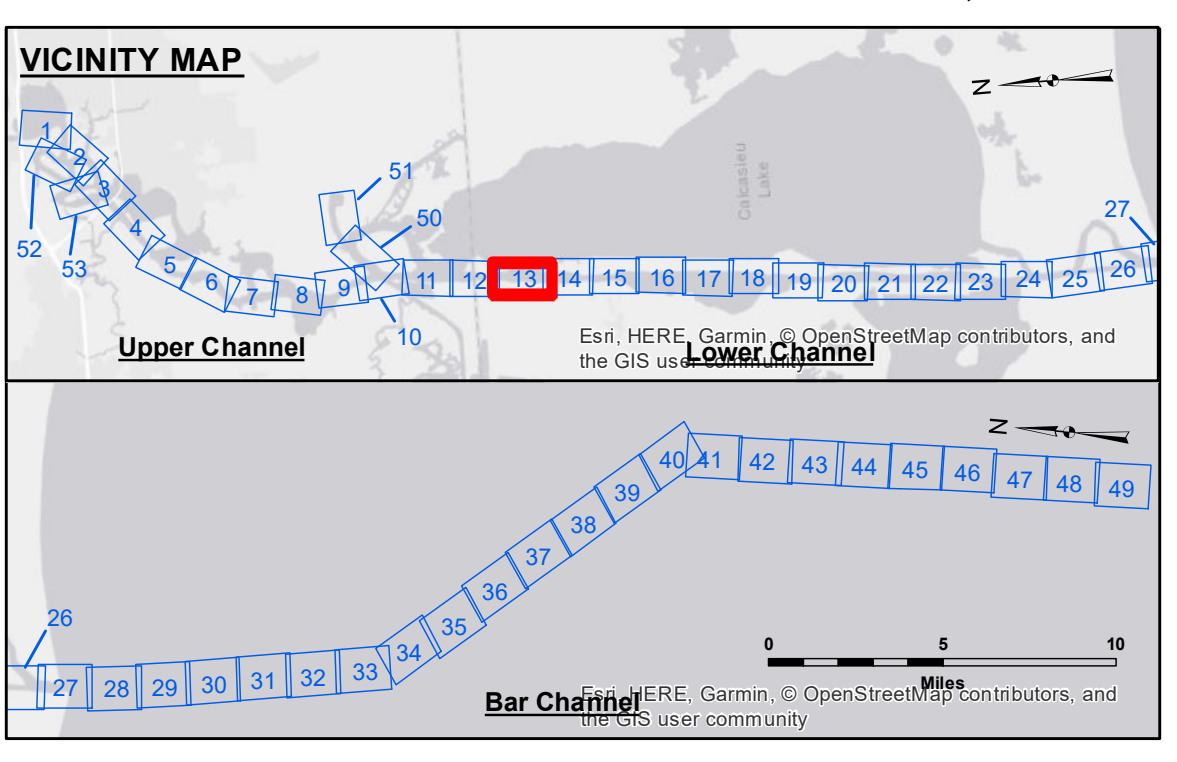


**DISCLAIMER**  
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the Government makes no warranty, expressed or implied, regarding the accuracy, completeness, reliability, usability or availability for any particular purpose of the information. The user is responsible for the results obtained from the use of this information. Application of the data for other than its intended purpose is prohibited. These data are being provided to the recipient under no liability whatsoever to any person by reason of any use made of them. The recipient shall not be held liable for any damage or injury to persons or property resulting from the use of this information. The recipient may not transfer these data to others without obtaining the approval of the Army Corps of Engineers. The recipient shall be responsible for changes in the data and shall be responsible for the results of any use of the data. The information depicted on this map represents the results of a survey conducted on or about the date indicated. It is not intended to represent the general condition existing at that time.

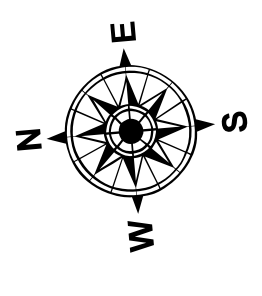
Submitted:	Surveyed By: PS, JH
Recommended: Chief, Survey Section	Plotted By: AO
Approved: Chief, Waterways Maintenance Section	Checked By: AO

**CALCASIEU SHIP CHANNEL  
 LOWER SHEET 13  
 CR\_13\_LWR\_20180423\_CS  
 23 April 2018**

**Sheet Reference Number  
 13 of 53**



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: HB/RANGED: 1.3 MLLW AVG  
 Sea Conditions: CALM  
 Vessel Name: LAFORCHE  
 Survey Type: CONDITION  
 Sounding Frequency\*\*\*: LOW

Feet  
 0 400 800 1,200 1,600

**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 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.