

Accession: 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 collected, and that the user is responsible for the results of any use of the data for other than its intended purpose.

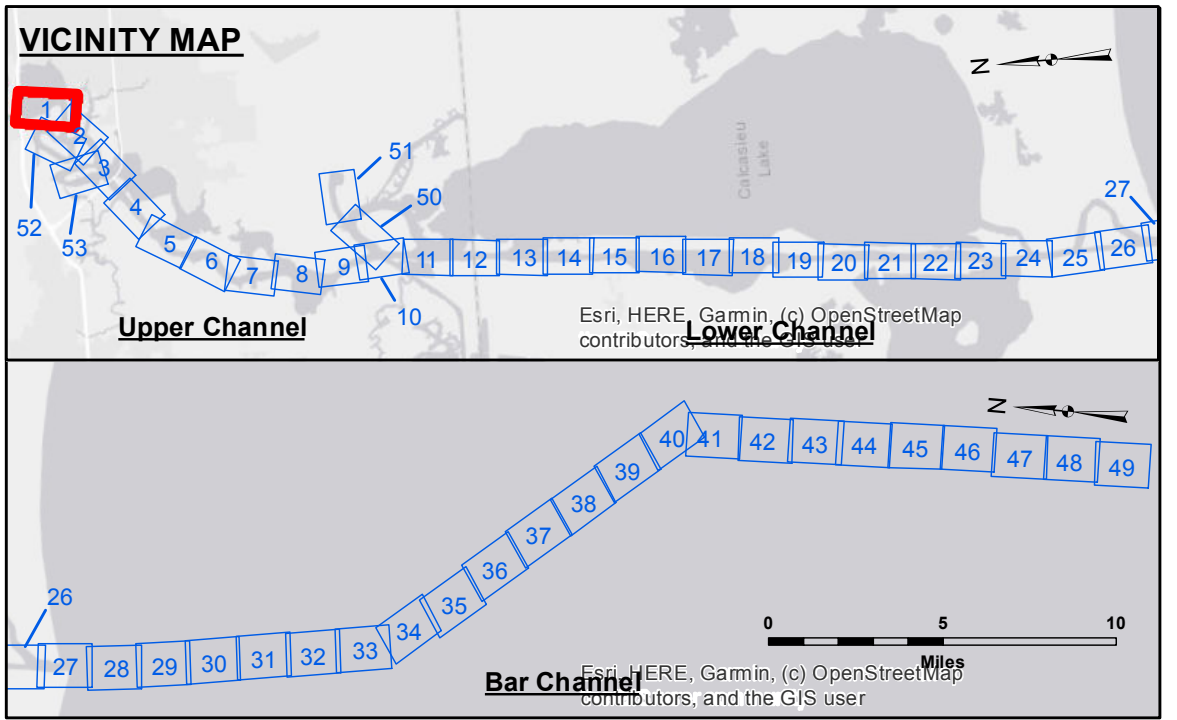
Accuracy: The data were collected using a Real Time Kinematic (RTK) Global Positioning System (GPS) receiver. The accuracy of the data is dependent on the quality of the equipment and the skill of the operator. The accuracy of the data is typically within 1.0 foot.

Disclaimer: The information depicted on this map represents the results of a survey conducted on the date of the survey. The Corps of Engineers does not warrant the accuracy of the information depicted on this map. The Corps of Engineers is not responsible for any errors or omissions in the data or for any damage or loss resulting from the use of the data.

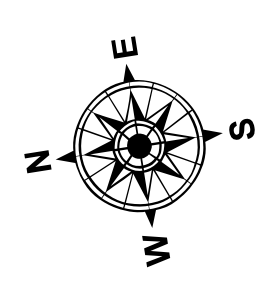
Submitted:	Surveyed By: SPPM	Plotted By: BD	Checked By: AC
Recommended:	Chief, Survey Section		
Approved:	Chief, Waterways Maintenance Section		

CALCASIEU SHIP CHANNEL
UPPER SHEET 1
CR_01_UPR_20210127_CS
27 January 2021

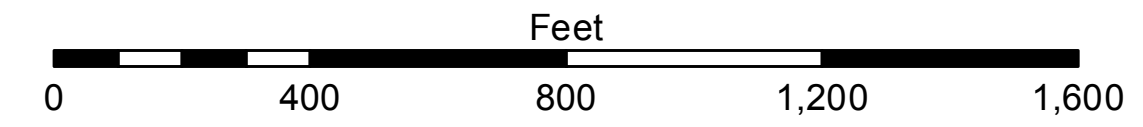
Sheet Reference Number
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LEGEND			
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	-16' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-16' to -21'
— As-built Pipeline/Cable	□ Anchorage Area	☆ Beacon, General	-21' to -26'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	-26' to -28'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	-28' to -34'
			-34' to -36'
			-36' to -38'
			-38' and below



Gage Reading: VRS RTK: 0.46 MLLW AVG.
 Sea Conditions: CHOPPY
 Vessel Name: OB-167
 Survey Type: CONDITION
 Sounding Frequency***: LOW



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 (MLLW). Datum Relationships for gage 73550 as of December 2013: 0.0' NAVD88 (OPUS 2010) = 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.