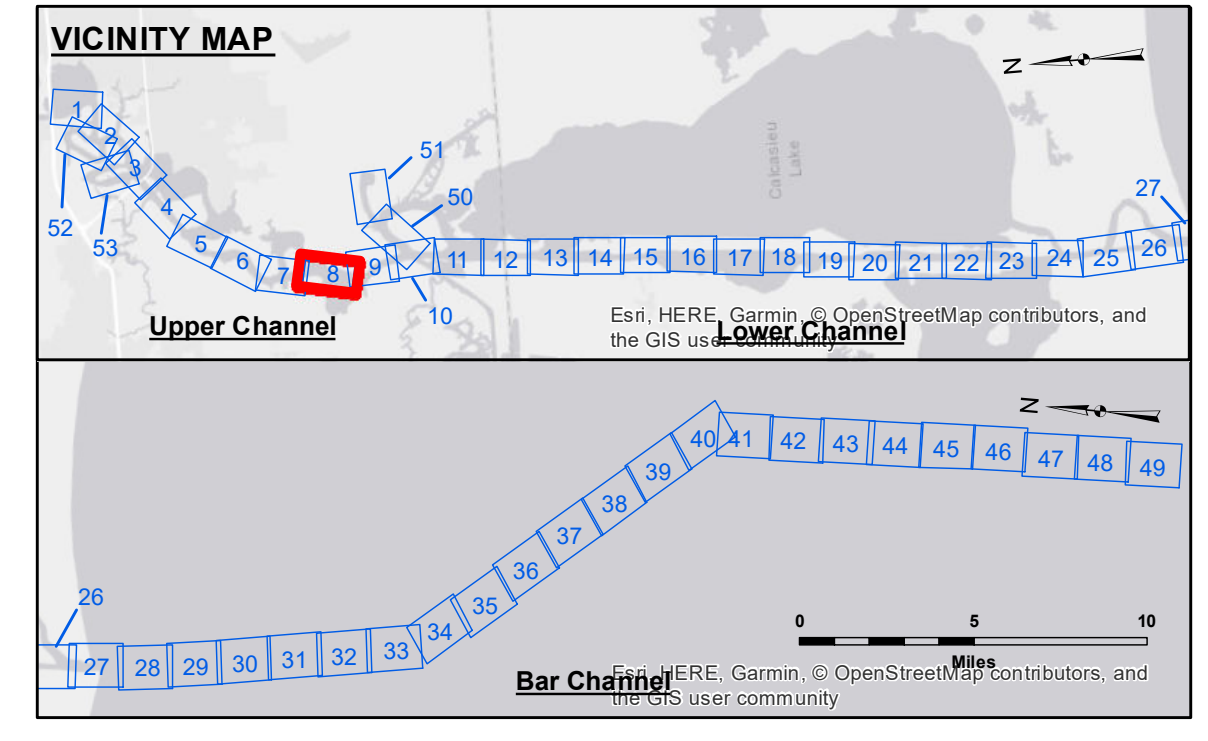


DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were originally prepared, or for any purpose for which they were not specifically intended. The user is responsible for the results of any use of the data for other than its intended purpose. The user is responsible for the results of any use of the data for other than its intended purpose. The user is responsible for the results of any use of the data for other than its intended purpose. The user is responsible for the results of any use of the data for other than its intended purpose.

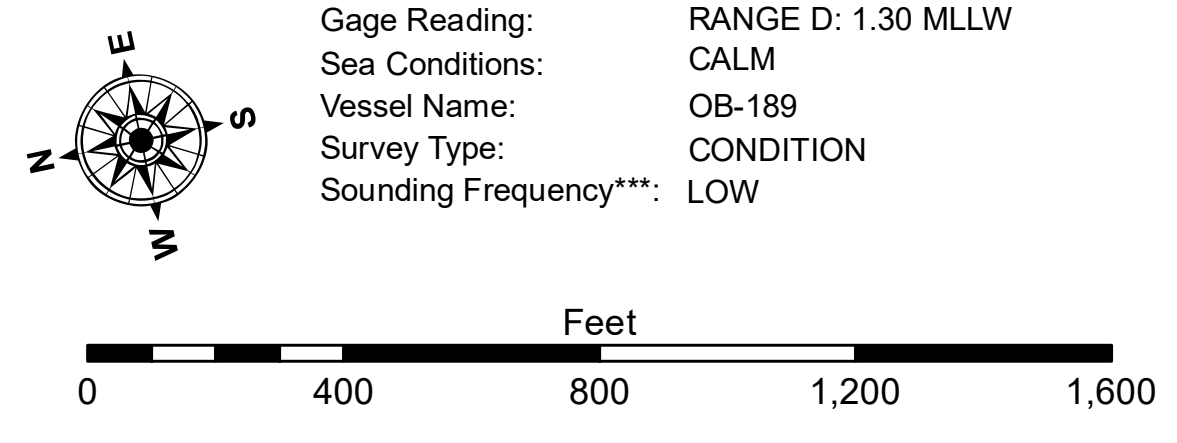
Submitted:	Surveyed By: JHDS
Recommended:	Plotted By: BD
Approved:	Checked By: AC

CALCASIEU SHIP CHANNEL
UPPER SHEET 8
CR_08_UPR_20190416_CS
16 April 2019

Sheet Reference Number
8 of 53



LEGEND		Fluff Thickness (feet)*	
--- Federal Navigation Channel	○ Cable Area	Red	-16' and above
— Federal Navigation Center Line	□ Placement Area	Orange	-16' to -21'
— As-built Pipeline/Cable	○ Anchorage Area	Yellow	-21' to -26'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	Light Green	-26' to -33'
— Project Depth Contour	✈ Wrecks-Submerged	Green	-33' to -39'
		Light Blue	-39' to -41'
		Blue	-41' to -43'
		Dark Blue	-43' and below
		Star	Beacon, General
		Diamond	Red Navigation Buoy
		Diamond	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 Lower Low Water Datum (MLLW). Datum Relationships for gage 73575 as of December 2013: 0.0' NAVD88 (OPUS 2013) = 0.8' MLLW = 1.8' 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.