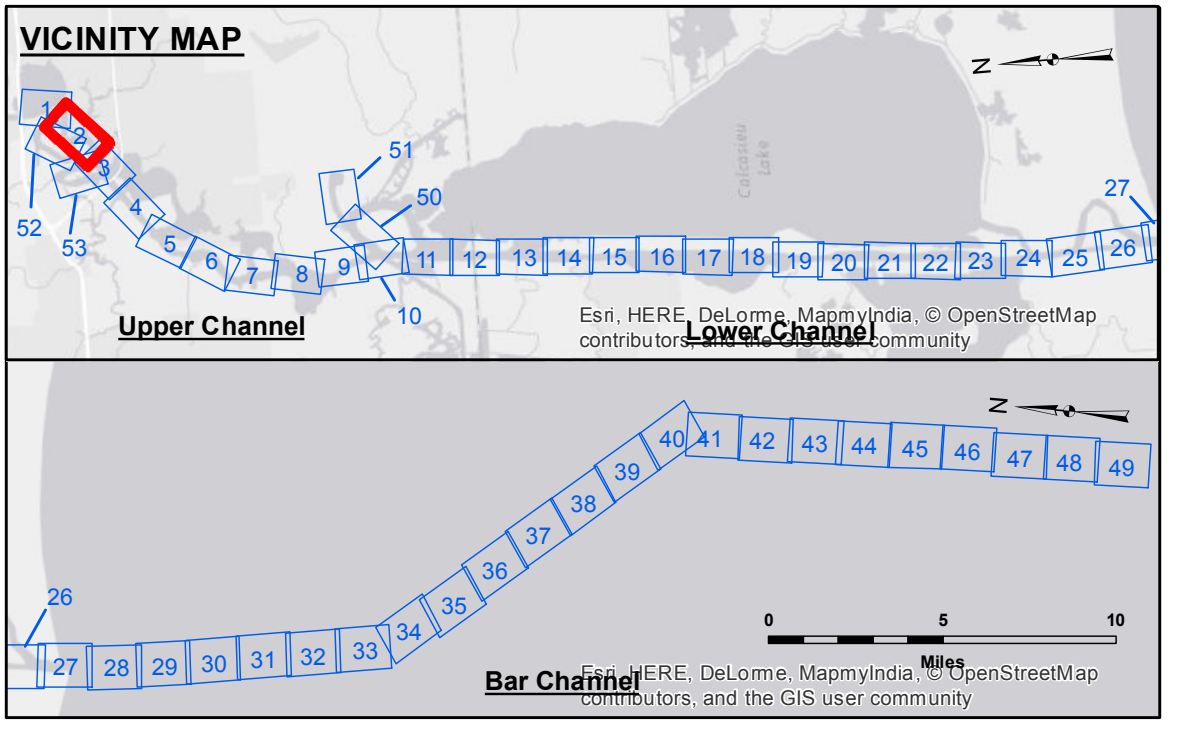


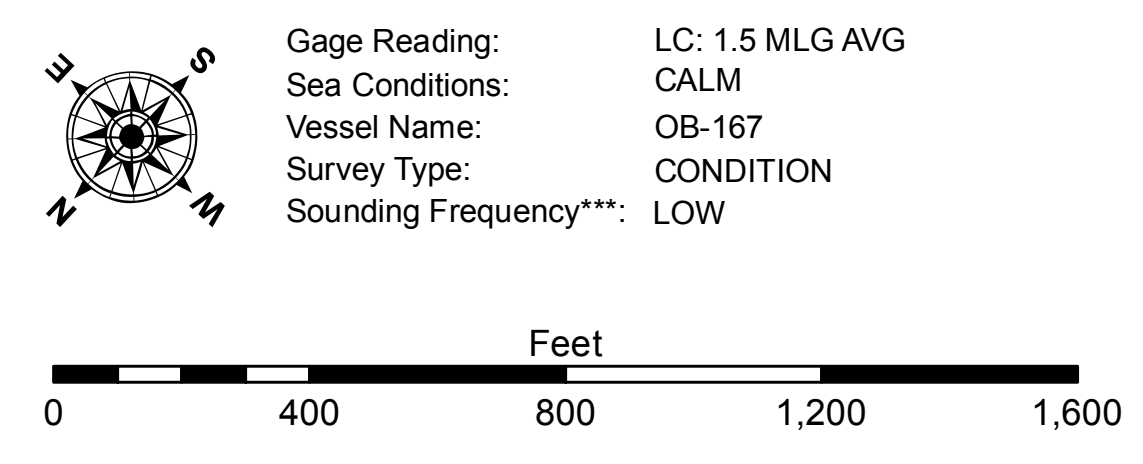
DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the United States Government. The user of this information is advised that the United States Government does not warrant the accuracy, reliability, or availability of this information for any purpose other than that for which it was prepared. The user is responsible for the results of any use of this information. The user is advised that the United States Government does not accept any liability for damages, including but not limited to, consequential damages, arising from the use of this information. The user is advised that the United States Government does not accept any liability for damages, including but not limited to, consequential damages, arising from the use of this information. The user is advised that the United States Government does not accept any liability for damages, including but not limited to, consequential damages, arising from the use of this information.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Chief, Survey Section
Reviewed By:	Chief, Waterways Maintenance Section
Approved:	
Surveyed By:	PS, JH
Plotted By:	AO
Checked By:	AO

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 2
 CR_02_UPR_20170221
 21 February 2017**



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
3 Fluff Thickness (feet)*	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
★ Beacon, General	◆ Green Navigation Buoy
◆ Red Navigation Buoy	
◆ 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 Low Gulf Datum (MLG).
 Datum Relationships for gage 73550 as of December 2013:
 0.0' NAVD83 (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 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. 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
 2 of 53**