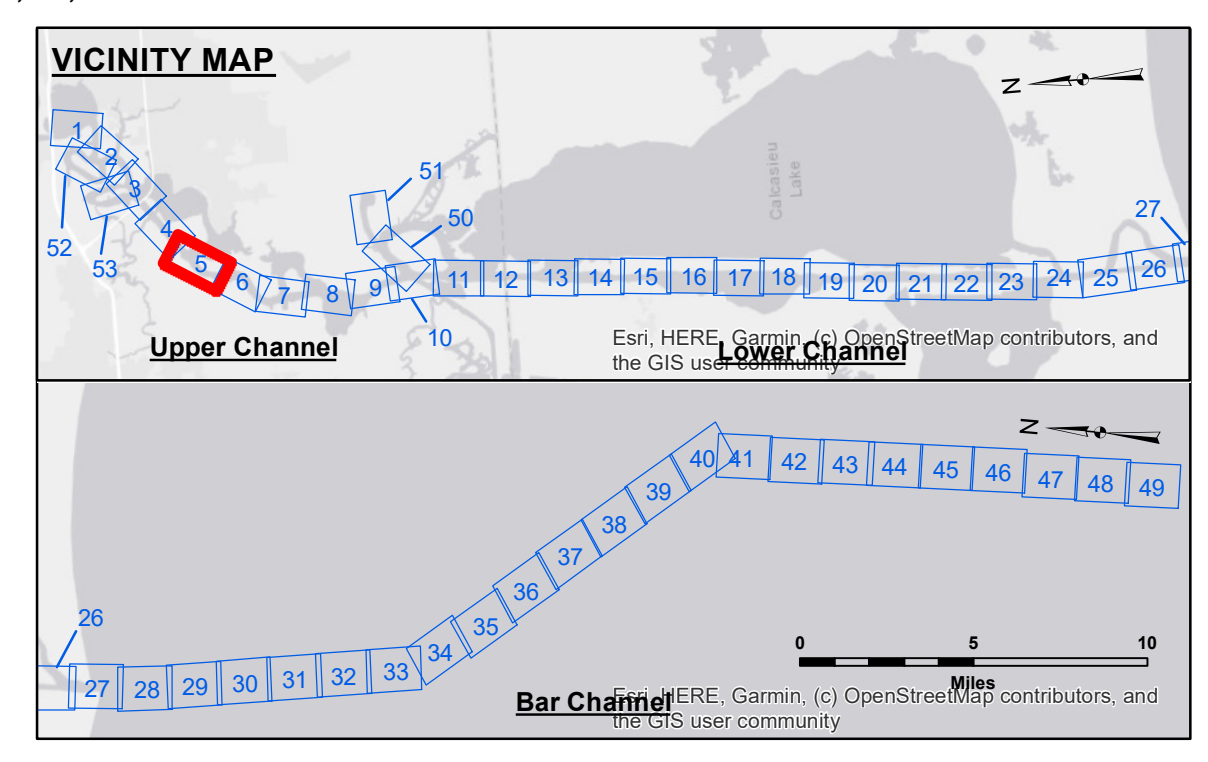


**DISCLAIMER**  
 The information depicted on this map represents the results of a survey conducted by the United States Government. The user of this information is advised that the United States Government does not warrant the accuracy, reliability, or completeness of the information. The user is responsible for the results of the information. The user is advised that the information is not to be used for any purpose other than that for which it was intended. The user is advised that the information is not to be used for any purpose other than that for which it was intended. The user is advised that the information is not to be used for any purpose other than that for which it was intended.

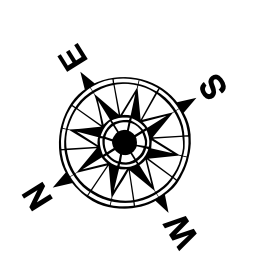
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: JDH/JA	Plotted By: AO
Recommended:	Checked By: AO	Checked By: AO
Approved:	Checked By: AO	Checked By: AO

**CALCASIEU SHIP CHANNEL  
 UPPER SHEET 5  
 CR\_05\_UPR\_20200310\_CS  
 10 March 2020**

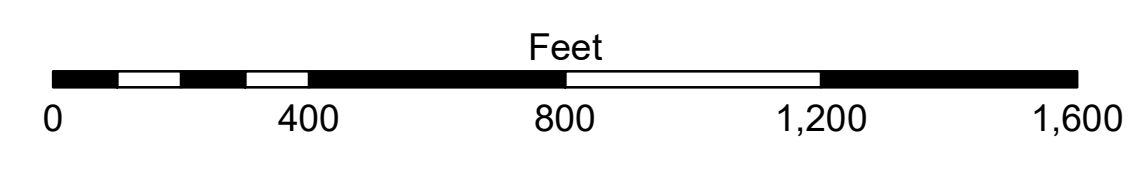
**Sheet Reference Number  
 5 of 53**



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: DM 114: 0.8 MLLW  
 Sea Conditions: CALM  
 Vessel Name: M/V VALENTOUR  
 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 Datum (MLLW). Datum Relationships for gage 73565 as of December 2013: 0.0' NAVD83 (OPUS 2013) = 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. 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.