

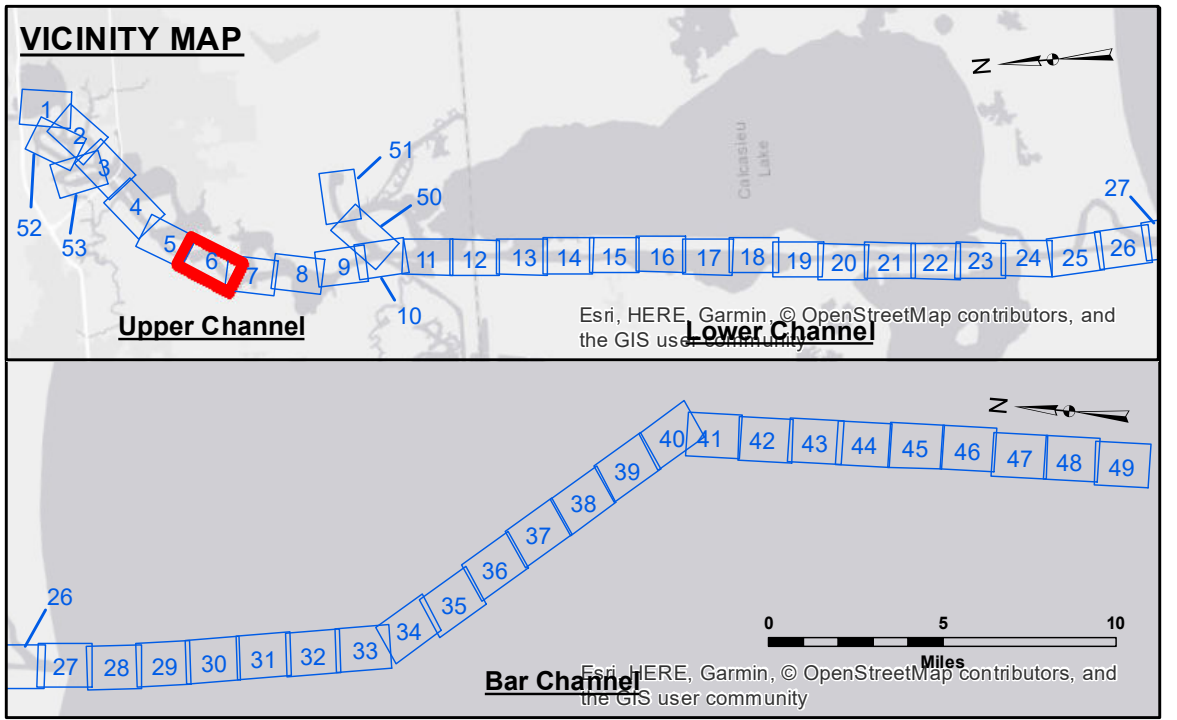
**US Army Corps of Engineers District: CEMVN**

**DISCLAIMER**  
 The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The user of this information is advised that the data is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose. The Corps of Engineers does not accept responsibility for changes in the hydrographic conditions when developed after the date of the survey. The Corps of Engineers does not warrant the accuracy of the data for any other purpose. The user of this information is advised that the data is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose. The Corps of Engineers does not accept responsibility for changes in the hydrographic conditions when developed after the date of the survey. The Corps of Engineers does not warrant the accuracy of the data for any other purpose.

Submitted:	Surveyed By:	RYLAND/ADAMS
Recommended:	Plotted By:	BD
Approved:	Checked By:	AC

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL  
 UPPER SHEET 6  
 CR\_06\_UPR\_20190523\_CS  
 23 May 2019**



**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

**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 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.

Gage Reading: DM 114: 2.21 MLLW AVG.  
 Sea Conditions: CHOPPY/WINDY  
 Vessel Name: OB1-89  
 Survey Type: CONDITION  
 Sounding Frequency\*\*\*: LOW

Feet  
 0 400 800 1,200 1,600

**Sheet Reference Number  
 6 of 53**