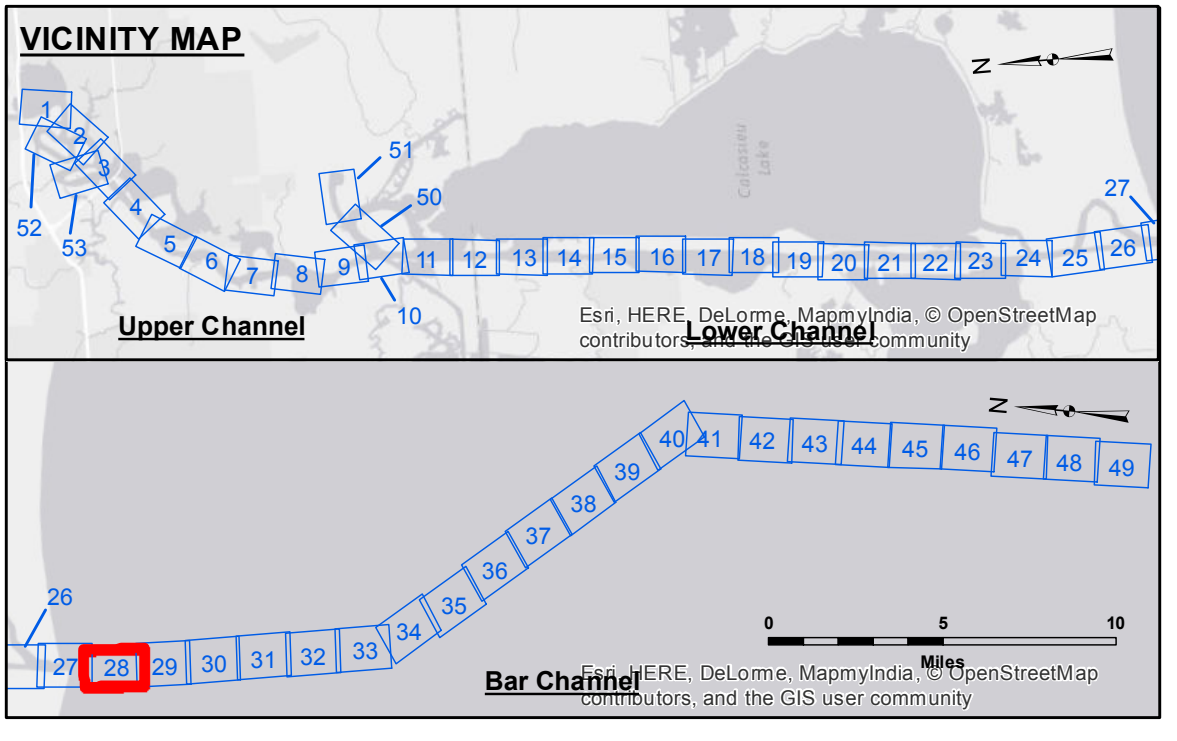


**US Army Corps of Engineers District: CEMVN**

**DISCLAIMER**  
 The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the accuracy, reliability, usability, or availability of any data derived from this map. The Corps of Engineers does not warrant the accuracy, reliability, usability, or availability of any data derived from this map. The Corps of Engineers is not responsible for any damage or injury resulting from the use of this map. The Corps of Engineers is not responsible for any damage or injury resulting from the use of this map. The Corps of Engineers is not responsible for any damage or injury resulting from the use of this map.

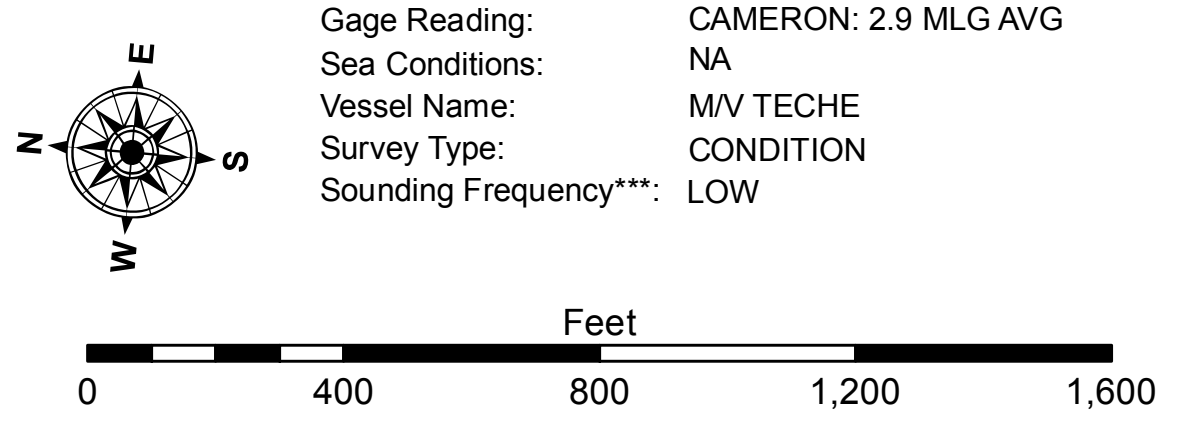
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: SJR, JDH
Recommended:	Plotted By: AO
Approved:	Checked By: TF

**CALCASIEU SHIP CHANNEL**  
**BAR SHEET 28**  
**CR\_28\_BAR\_20160630**  
**30 June 2016**



**LEGEND**

--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	■ -15' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -15' to -20'
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General	■ -20' to -25'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -25' to -32'
— Project Depth Contour	✈ Wrecks-Submerged	◆ Green Navigation Buoy	■ -32' to -38'
			■ -38' to -40'
			■ -40' to -42'
			■ -42' 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 Low Gulf Datum (MLG).  
 Datum Relationships for gage 73650 as of December 2013:  
 0.0' NAVD88 (2009.55) = 1.3' MLLW = 2.3' 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.

**Sheet Reference Number**  
**28 of 53**

Revision Number:  
 3.8.9-20150202