

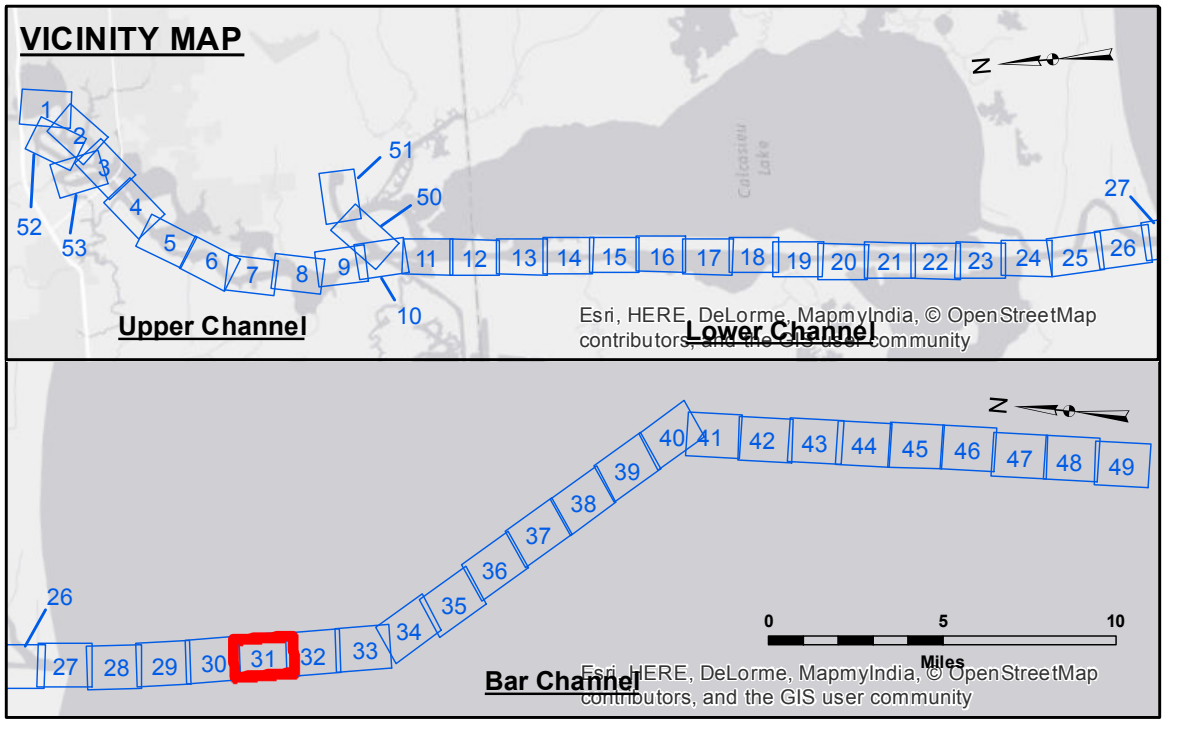
**DISCLAIMER**  
 The information depicted on this map represents the results of a hydrographic survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use.

Submitted:	Surveyed By: JH/SPS
Recommended:	Plotted By: AIO
Approved:	Checked By: TF

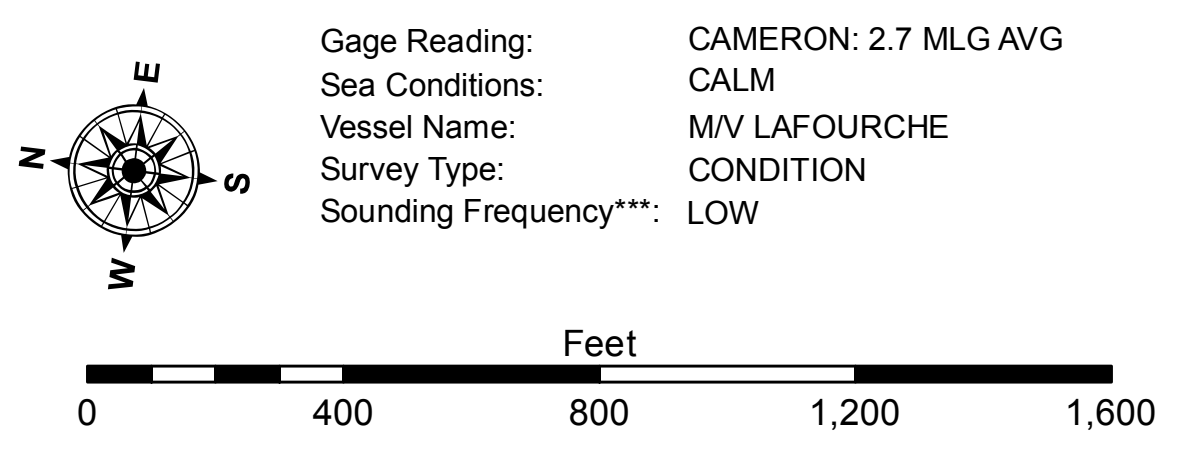
U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL**  
**BAR SHEET 31**  
**CR\_31\_BAR\_20150108**  
**08 January 2015**

**Sheet Reference Number**  
**31 of 53**



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
□ Borrow Area	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
○ Green 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 73650 as of December 2013: 0.0' NAVD83 (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 base on and provided by the U.S. Coast Guard and USACE survey crews.  
 2010 Aerial Photography data source: NAIP  
 Reference is N.O.A. Navigation Chart No. 11339.  
 \*\* 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.