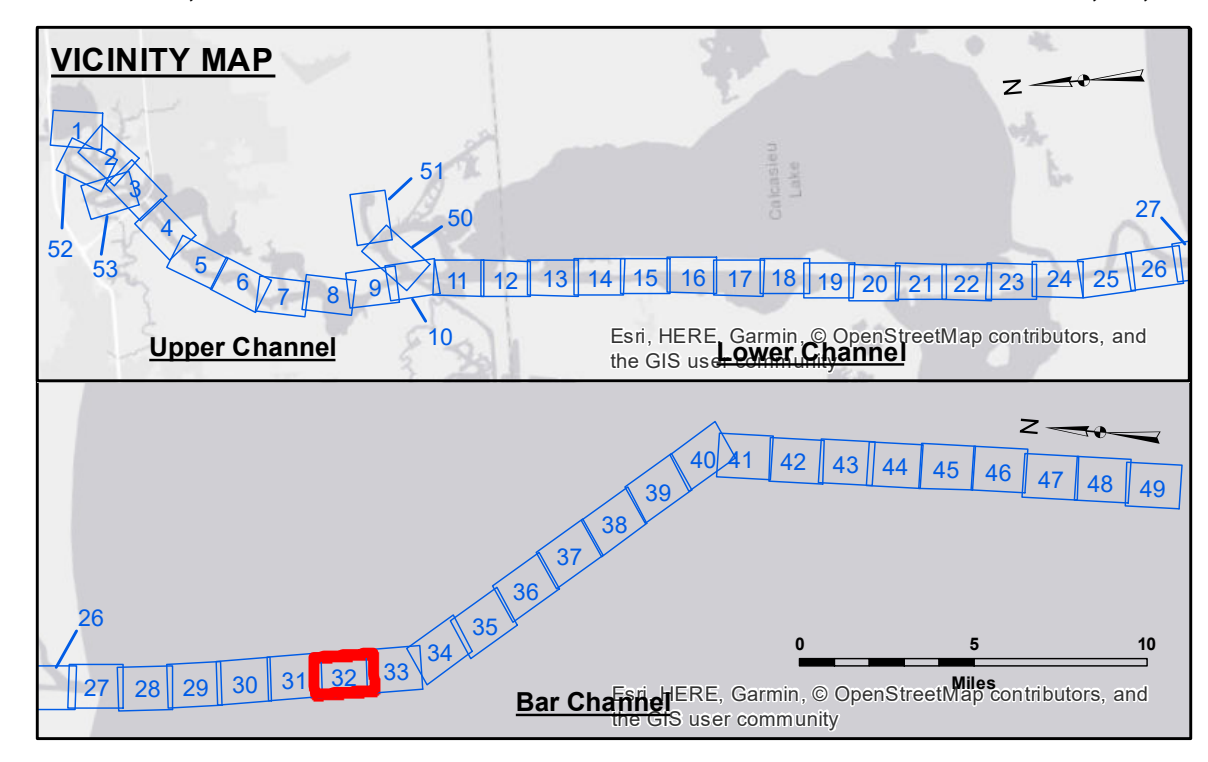


Distribution Liability: The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results. Application of the data for other than its intended purpose. Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to changing bathymetry, shifting of the seabed, and other factors. The user is responsible for the results of the data. The information depicted on the map represents the results of a hydrographic survey. It is not intended to be used for navigation purposes. The user is responsible for the results of the data.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: JH/DK	Checked By: AC
Recommended:	Plotted By: BD	Approved:
Chief, Survey Section		Chief, Waterways Maintenance Section

CALCASIEU SHIP CHANNEL
BAR SHEET 32
CR_32_BAR_20190410_CS
10 April 2019



LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- As-built Pipeline/Cable
- Unconfirmed Pipeline/Cable
- Project Depth Contour
- Cable Area
- Placement Area
- ⊗ Anchorage Area
- ⊗ Obstruction Point
- ⊗ Wrecks-Submerged
- 3 Fluff Thickness (feet)*
- Shoalest Sounding**
- ☆ Beacon, General
- ◆ Red Navigation Buoy
- ◆ Green Navigation Buoy
- 16' and above
- 16' to -21'
- 21' to -26'
- 26' to -33'
- 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 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.

Gage Reading: CAMERON: 2.15 MLLW AVG
Sea Conditions: CALM
Vessel Name: OB-189
Survey Type: CONDITION
Sounding Frequency***: LOW