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Disclaimer: The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The information is not to be used for any purpose other than that for which it was originally collected. The information is not to be used for any purpose other than that for which it was originally collected.

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, content, time and accuracy specifications. The user is responsible for the results of any use of the data for other than its intended purpose.

Data Constraints: Hydrographic survey data is subject to change due to several factors including but not limited to changing hydrographic conditions which develop after the date of the survey. The user is responsible for the results of any use of the data for other than its intended purpose.

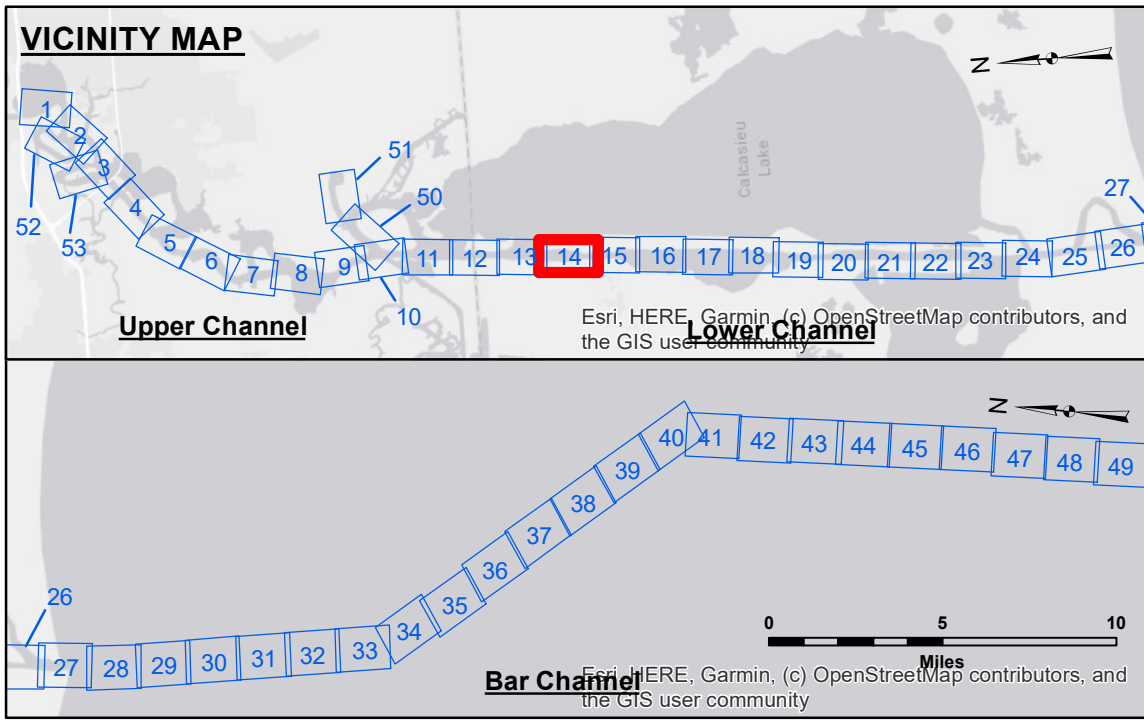
Product: The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The information is not to be used for any purpose other than that for which it was originally collected.

Submitted:	Surveyed By: SP/DS
Recommended:	Plotted By: AO
Approved:	Checked By: AO

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
LOWER SHEET 14
CR_14_LWR_20191218_CS
18 December 2019**

**Sheet Reference Number
14 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: HACKBERRY: 0.25 MLLW
Sea Conditions: CALM
Vessel Name: OB-169
Survey Type: CONDITION
Sounding Frequency*:** LOW

Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).
 Datum Relationships for gage 73600 as of December 2013:
 0.0' NAVD83 (OPUS 2010) = 1.0' MLLW = 2.0' 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.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.

