



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

Gage Reading: DM72: 1.85 MLLW USED
 Sea Conditions: CALM
 Vessel Name: OB-167
 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 73615 as of December 2013:
 0.0' NAVD83 (2009.55) = 1.1' MLLW = 2.1' 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. 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.



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, reliability, usability, or suitability of the data for any purpose other than that for which it was collected. The user is responsible for the accuracy, reliability, usability, or suitability of the data for any purpose other than that for which it was collected. The user is responsible for the accuracy, reliability, usability, or suitability of the data for any purpose other than that for which it was collected.

Submitted:	Surveyed By:
Recommended:	DS, JH
Checked By:	Checked By:
Chief, Survey Section	PLOTTED_BY
Checked By:	CHECKED_BY
Chief, Waterways Maintenance Section	

**U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT**

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 20
 CR_20_LWR_20180918_CS
 18 September 2018**

**Sheet Reference Number
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