



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
3 Fluff Thickness (feet)*	★ Beacon, General
● Shoalest Sounding**	◆ Red Navigation Buoy
◆ Green Navigation Buoy	

Gage Reading: DM114: 1.3 MLLW
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 73565 as of December 2013:
 0.0' NAVD88 (OPUS 2013) = 0.6' MLLW = 1.6' 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.



DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are for informational purposes only and are not to be used for any purpose other than that for which they were provided. The user is responsible for the results of any use of the data. The United States Government does not warrant the accuracy, completeness, or availability of the data for any purpose other than that for which they were provided. The user is responsible for the results of any use of the data. The United States Government does not warrant the accuracy, completeness, or availability of the data for any purpose other than that for which they were provided. The user is responsible for the results of any use of the data.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: DS, JH
Recommended:	Plotted By: AO
Approved:	Checked By: AC

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 5
 CR_05_UPR_20180919_CS
 19 September 2018**

**Sheet Reference Number
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