



LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy

Gage Reading: VRS RTK NTRIP: 1.69 MLLW  
 Sea Conditions: CHOPPY  
 Vessel Name: OB-169  
 Survey Type: CONDITION  
 Sounding Frequency\*\*\*: LOW

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 73575 as of December 2013:  
 0.0' NAVD88 (OPUS 2013) = 0.8' MLLW = 1.8' 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.



**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 intended for navigation. The user is responsible for the accuracy, reliability, usability, or suitability for any particular purpose of the data. The user shall indemnify and hold the United States Government harmless from and against all claims, damages, and expenses, including reasonable attorneys' fees, arising out of or from the use of the data for other than its intended purpose. The United States Government does not warrant the accuracy, reliability, usability, or suitability of the data for other than its intended purpose. The user shall accept responsibility for changes in the data due to several factors including but not limited to changes in the hydrographic conditions which develop after the date of the survey. The user shall accept responsibility for changes in the data due to several factors including but not limited to changes in the hydrographic conditions which develop after the date of the survey. The user shall accept responsibility for changes in the data due to several factors including but not limited to changes in the hydrographic conditions which develop after the date of the survey. The user shall accept responsibility for changes in the data due to several factors including but not limited to changes in the hydrographic conditions which develop after the date of the survey.

Submitted:	Reviewed By: SPSS
Recommended:	Plotted By: BD
Approved:	Checked By: AC

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL**  
**UPPER SHEET 9**  
**CR\_09\_UPR\_20220421\_CS**  
**21 April 2022**

**Sheet Reference Number**  
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