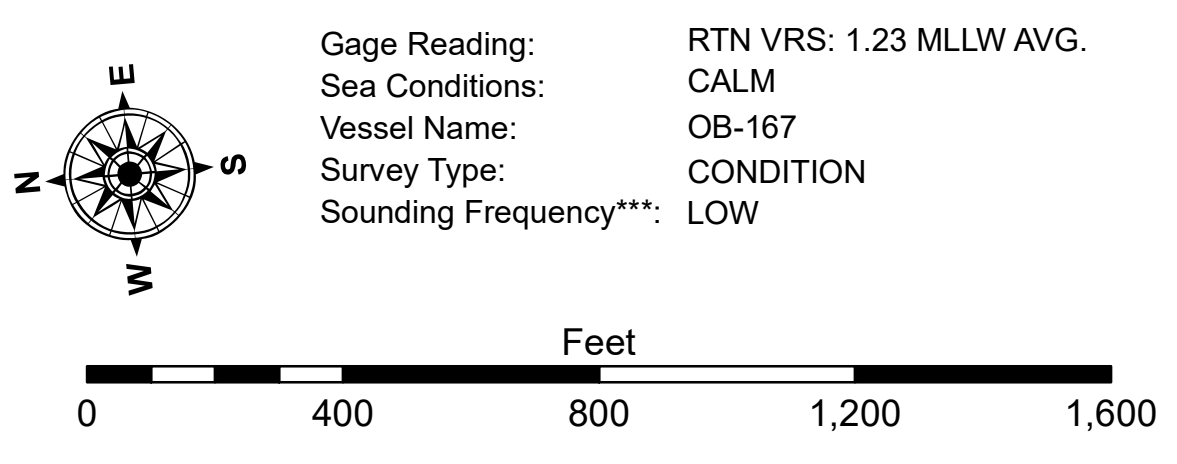


**LEGEND**

--- 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



**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 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.

2022 Aerial Photography data source: PAR LLC  
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.



**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, content, time and accuracy specifications. The user is responsible for the results and accuracy of the data for their intended use. Data Constants: Hydrographic survey data is subject to change due to several factors including but not limited to changing hydrographical conditions which develop after the date of the survey. The US Army Corps of Engineers accepts no responsibility for changes in the hydrographical conditions which develop after the date of the survey. The user is responsible for the results of the data for their intended use. Product manuals should not rely upon it.

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT

Submitted:	Surveyed By: SPPM
Recommended: Chief, Survey Section	Plotted By: BD
Approved:	Checked By: AC

**CALCASIEU SHIP CHANNEL  
LOWER SHEET 19  
CR\_19\_LWR\_20220721\_CS  
21 July 2022**

**Sheet Reference Number  
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