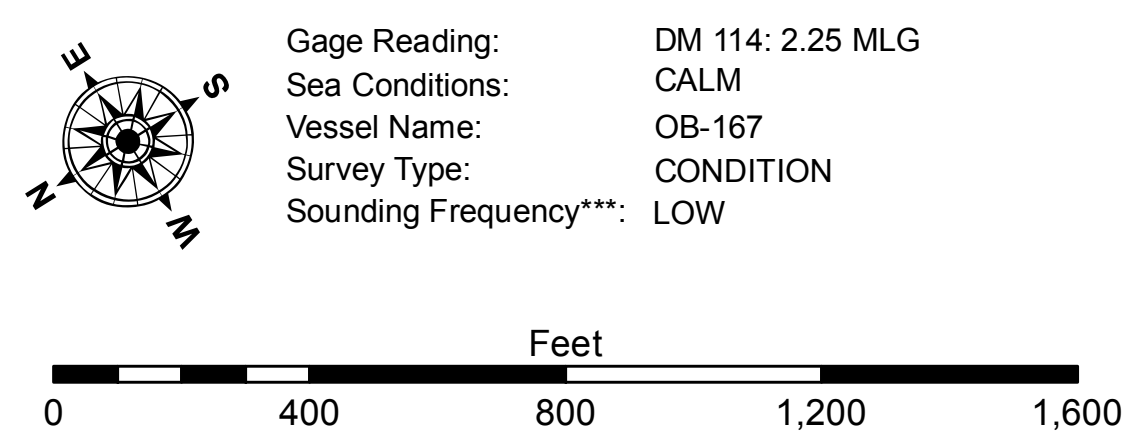


LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth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



**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 Low Gulf Datum (MLG).  
 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 information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The user is responsible for the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of the application of the data for other than its intended purpose. The user is responsible for the results of the application of the data for other than its intended purpose. The user is responsible for the results of the application of the data for other than its intended purpose. The user is responsible for the results of the application of the data for other than its intended purpose.

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

**CALCASIEU SHIP CHANNEL  
 UPPER SHEET 5  
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 27 October 2016**

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