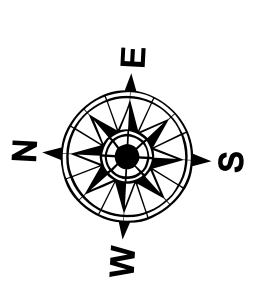


LEGEND	
--- Federal Navigation Channel	○ Cable Area
— Federal Navigation Center Line	□ Placement Area
— As-built Pipeline/Cable	□ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
— Project Depth Contour	⚓ Wrecks-Submerged
3 Fluff Thickness (feet)*	★ Beacon, General
● Shoalest Sounding**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



Gage Reading:	RANGE D: 1.6 MLLW
Sea Conditions:	CHOP
Vessel Name:	OB-167
Survey Type:	CONDITION
Sounding Frequency***:	LOW

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 73585 as of December 2013: 0.0' NAVD83 (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 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.



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 any application of the data for other than its intended purpose.
 Data: Hydrographic survey data is subject to change due to several factors including but not limited to changing hydrographic conditions which develop after the date of the survey. The user is responsible for the results of the data and the hydrographic conditions which develop after the date of the survey. The user is responsible for the results of the data and the hydrographic conditions which develop after the date of the survey. The user is responsible for the results of the data and the hydrographic conditions which develop after the date of the survey.

Submitted:	Surveyed By: SP,DS	Plotted By: AO	Checked By: AO
Recommended:	Chart, Survey Section		
Approved:	Chart, Waterways Maintenance Section		

CALCASIEU SHIP CHANNEL
UPPER SHEET 10
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27 November 2019

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