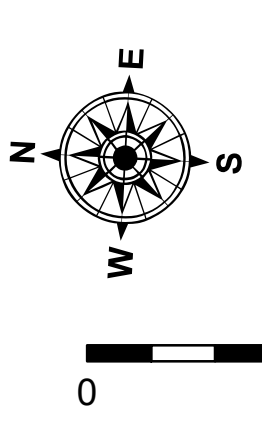


LEGEND			
— Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	-16' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-16' to -21'
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General	-21' to -26'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ 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



Gage Reading: RANGE E: 1.6 MLLW AVG.
 Sea Conditions: CHOPPY/WINDY
 Vessel Name: OB-167
 Survey Type: CONDITION
 Sounding Frequency***: LOW

Feet
 0 400 800 1,200 1,600

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 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.



Access/Use: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that they are not to be used for any purpose other than that for which they were originally prepared, or for any purpose for which they were not specifically intended. The user is responsible for the results obtained from the use of these data. The user is not to be held liable for any damage or injury resulting from the use of these data. The user is not to be held liable for any damage or injury resulting from the use of these data. The user is not to be held liable for any damage or injury resulting from the use of these data.

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

CALCASIEU SHIP CHANNEL
UPPER SHEET 9
CR_09_UPR_20191126_CS
26 November 2019

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Revision Number:
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