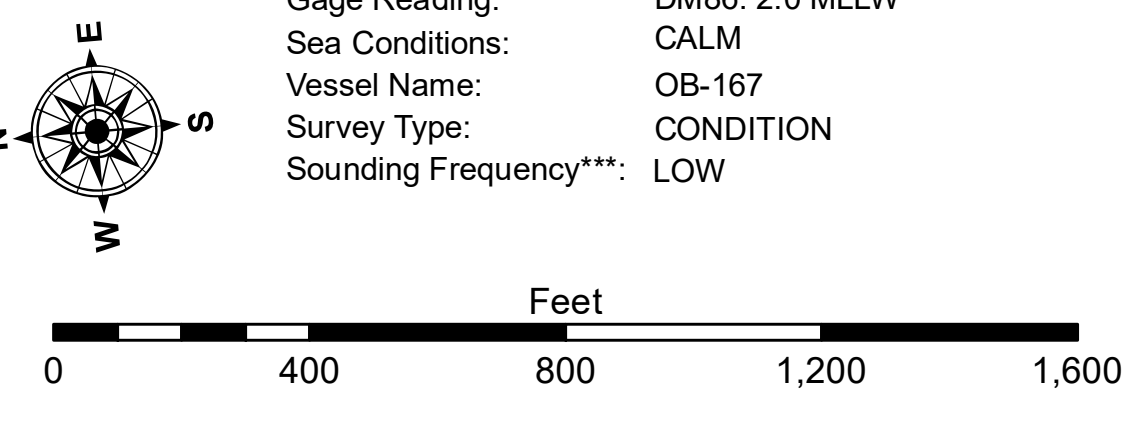


LEGEND

--- 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 73595 as of December 2013:
0.0' NAVD83 (OPUS 2013) = 0.9' MLLW = 1.9' 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 United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were prepared, and that the United States Government is not liable for any damages, including consequential damages, resulting from the use of these data. The recipient understands that the data are provided as is, without warranty of any kind, and that the recipient is solely responsible for the results of their use. The recipient understands that the data are provided for informational purposes only and that the recipient should not rely on the data for any critical decision-making. The recipient understands that the data are not to be used for any purpose other than that for which they were prepared, and that the United States Government is not liable for any damages, including consequential damages, resulting from the use of these data. The recipient understands that the data are provided as is, without warranty of any kind, and that the recipient is solely responsible for the results of their use.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

Submitted:	Surveyed By: DS, JH
Recommended: Chief, Survey Section	Plotted By: AO
Approved:	Checked By: AO

**CALCASIEU SHIP CHANNEL
LOWER SHEET 13
CR_13_LWR_20180919_CS
19 September 2018**

**Sheet Reference Number
13 of 53**

Revision Number:
3.13-20180911