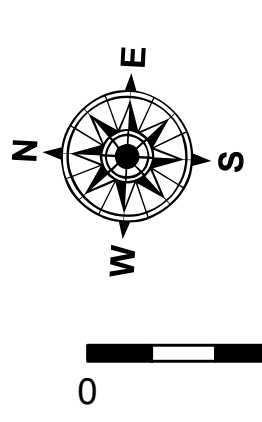
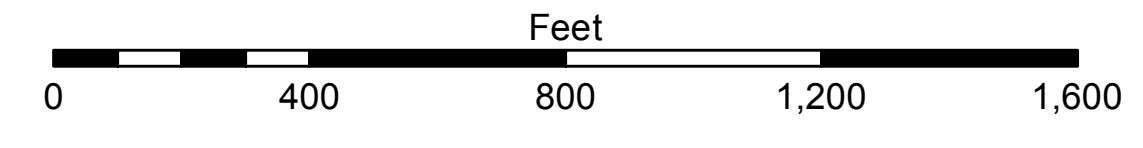


LEGEND

--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	■ -15' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -15' to -20'
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General	■ -20' to -25'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -25' to -32'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	■ -32' to -38'
			■ -38' to -40'
			■ -40' to -42'
			■ -42' and below



Gage Reading: RANGE E: 3.6 MLG
 1'
 Sea Conditions: MV TECHE
 Vessel Name: CONDITION
 Survey Type: LOW
 Sounding Frequency***: LOW



587,000
 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 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.



DISCLAIMER

The information depicted on this map represents the results of a survey conducted by the United States Army Corps of Engineers. The data represents the results of data collection for a specific project and is not intended for any other purpose. The user is responsible for the accuracy, reliability, usability, or availability of any particular purpose of the information. The user is responsible for the accuracy, reliability, usability, or availability of any particular purpose of the information. The user is responsible for the accuracy, reliability, usability, or availability of any particular purpose of the information.

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By:	SPS JH
Recommended:	Plotted By:	BD
Approved:	Checked By:	AC

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 9
 CR_09_UPR_20170908_CS_POSTSTORM
 08 September 2017**

**Sheet Reference Number
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